SPINAL CURVATURE.
ITS CONSEQUENCES.
ITS CURE.

BY

JOHN B. SERNY, M.D.

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SPINAL CURVATURE.—A Treatise on Spinal Curvature has recently been put into our hands, written by Dr. SERNY, and published by Sherwood and Co. which is, in our opinion, marked by more philosophical views of the nature of the distressing affliction, and more sound sense in the practice necessary to its cure, than any we have ever before met with. The torture to the patient, and the destruction to his constitution, which almost invariably attended the old methods of treatment have been superseded with complete success, by the simple, scientific and effectual mode of remedy practised by the doctor. The terrors of blisters, cuppings, setons, issues, and moxas in the spine, are all dispensed with; and humane, gentle, and rational means applied in their stead. The plates in the work are extremely well executed, and illustrate with the greatest clearness the progress towards cure in the cases given. We earnestly recommend all who are afflicted with this class of disease, to read this work, and to put the three leading questions, in the preface, to any medical practitioner who may undertake their cure.—*Extracted from The North Devon Journal, Dec.* 3, 1840.

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SPINAL CURVATURE.

SPINAL CURVATURE,

ITS CONSEQUENCES,

AND

ITS CURE:

ILLUSTRATED BY THE HISTORY OF THIRTY-THREE CASES, SUCCESSFULLY TREATED.

By JOHN B. SERNY, M.D.

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This Book

IS, WITH THE GREATEST RESPECT,

Dedicated

TO THE MEMORY OF THE LATE

DR. HARRISON;

WHOSE NAME WILL BE IMMORTALIZED FOR THE ESTABLISHMENT

OF A

NEW AND SCIENTIFIC METHOD

FOR THE CURE OF

SPINAL COMPLAINTS,

BY HIS FORMER PUPIL AND LATE PARTNER,

JOHN B. SERNY, M. D.

July 24th, 1840.

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PREFACE.

To every medical practitioner, who professes to cure *Curvature of the Spine*, the patient, affected with curvature, who consults him, has a right to put two questions;

First, CAN YOU MAKE MY BACK STRAIGHT? and

Second, CAN YOU KEEP IT SO?

Without a positive affirmative to these questions, no patient should confide his case to such practitioner's care. If the practitioner can give the affirmative answer, (after a careful examination of the curvature itself, of the history of the curvature, of the state of the constitution of the person affected, and all other subsidiary circumstances,) then the intended patient has a right to appeal to him for the *grounds*, upon which he founds that affirmative declaration: he has a right to ask a *third* question;—WHAT ARE THE GROUNDS UPON WHICH YOU FOUND YOUR AFFIRMATIVE DECLARATION?

These grounds may be twofold. The practitioner may have a *new theory* of spinal disease: he may consider that he has discovered *the*, or at least, *a cause* of spinal curvatures, which previously has been overlooked: he may found on this discovery of the cause a *new method of treatment*, and he considers himself

justified both in using a certain method of treatment, or certain methods, as following out that view, and, in expecting success from the prosecution of such method or methods. It was a *process of reasoning*, induced by the lamentable fact, that the prior method of treating spinal diseases was not only not successful, but torturing to the individual, and destructive to the constitution, that led Dr. Harrison, to devise the simple, the scientific, the effectual method of treatment, which now goes by his name; which he spent a life in perfecting, and which he had to support against the usual charge of quackery. That system originated in *reasoning:* he put it into practice: and the practitioner aware of his practice, has realized a second ground, upon which his conclusion, that spinal curvatures can be both removed and prevented returning, is justified: namely, CASES IN WHICH CURES HAVE BEEN EFFECTED.

These are the *best* evidences, because they are *practical* illustrations of the *theory:* they are visible proofs. Dr. Harrison made it a rule, for many years, to have a *cast* of each patient taken when *coming* under his treatment, and another taken when the treatment *was concluded.* He thus created a sure test of his practice: because every person could judge, by such means, of the success or the non-success of his methods.

Some of the cases which came under Dr. Harrison's care, are published in the following pages; and I have great pleasure in bringing them forward, because, in many of them I have been actively engaged: and not only this, but I feel it a duty I owe to the memory of that firm and unflinching friend of humanity, (my first instructor in medicine, having been his pupil, and afterwards being connected with him in partnership), to bring some of his

labours before the public, and thereby to point out the immortality that awaits him as the first inventor of the primary source of all the success, in later times, that has been or shall be realized in the treatment of curvature of the spine.

Before, and even since, Dr. Harrison's time, every medical practitioner is aware that the treatment of spinal curvature by many, who are deemed the first surgeons, was torture, consisting of *blistering*, *leeching*, *cupping*, *setonizing*, putting *issues* and *moxas* in the spine or its sides. Dr. Harrison was the overturner of this profitable system; and, like all persons who improve, was persecuted and reviled by those who found, as the poet Schiller says, setonizing, moxa-making, issue-forming, to make the practice of surgery,

"A good cow that gave them milk."

Dr. Harrison has now gone. Since his death many works have come from the press on the treatment of spinal curvatures: many of the authors have adopted a part of Dr. Harrison's treatment, evidently without appreciating the principles upon which that treatment is founded: many others show, by their works, that they understand nothing of the matter; but having found that the sufferers from spinal curvatures are determined to be tortured no more, they have hastened to put themselves forward as likely to catch some one, who seeks to be cured by some other plan than torture. *They may learn the way of cure on their patients.*

The circumstances named would of themselves be quite sufficient to justify me in bringing forward the evidences of the efficacy of Dr. Harrison's method, as practised under his sole inspection, and as practised under his and my combined inspection; and when, to these, I can add cases of cure performed by *myself, by following out*

Dr. Harrison's mode of treatment, I think that the publication, now ushered into the world, will be received without any charge attached to the author, either of vanity or arrogant pretension.

The cases themselves will show how many *diseased states* arise from, and are connected with, spinal curvatures: how these diseased states, being so dependent upon these curvatures, were unsuccessfully treated under the most eminent physicians and surgeons, but were immediately removed by a restoration of the spinal column to its proper condition. These cases will further demonstrate the necessity, on the part of the conscientious medical practitioner, *to examine the spinal column* when symptoms such as those described in these cases occur.

Among these cases, the case of Master Chilcott is particularly worthy of interest, as demonstrating, to my mind at least, that *rachitic and scrofulous* affections are dependent upon spinal curvature; and, that curing the spinal curvature will remove the rachitic or the scrofulous condition. It may be urged, that the rachitic or scrofulous condition is the *cause* of the spinal curvature. This is not my opinion, but into this I propose to enter in the second volume, in which an explanation of the symptoms, detailed in these cases, will be explained, and my views on spinal diseases fully detailed.

The cases also, in which the *shortening of the limbs* was cured by curing the spinal curvature, are highly interesting, and will tend to save many hundreds from being tortured for *hip-joint* disease, where no such disease exists. The remarks, in connexion with the deformity of the feet, consequent upon spinal curvature, will be useful.

The wood cuts and the plates, given in connexion with these

cases, were prepared from casts taken from the patients, or from drawings made from the patients themselves. Their genuineness and authenticity cannot be disputed; and, in many examples, the parties themselves are willing to be appealed to as proving the permanent success of the mode of treatment; though, as all experienced persons are aware, that patients, while anxious to realize to others the benefits realized to themselves, are sometimes precluded from placing their recovery in prominence, from the injury that the knowledge that spinal curvature was once their lot, might inflict upon their future prospects. This throws a barrier in the way of reference, but still I am happy that I am at liberty, where the inquiry is made with a proper object, to refer to a majority of the persons whose cases are recorded.

I now conclude this preface by stating that should the sale of the work justify, I shall publish, in the course of the year, a second volume, embracing the points already referred to, as well other symptoms.

JOHN B. SERNY.

Holles Street, Cavendish Square,
1*st July*, 1840.

INTRODUCTION.

As this treatise will fall, like all treatises which describe the sufferings of any particular class, into the hands of that class, and, as the individuals belonging to such class, may not be acquainted with some *technical* terms, which, to avoid circumlocution, it has been necessary to employ in the following pages, a short explanatory statement may be given of these terms.

1. Spine, Vertebræ.
2. Spinal Curvature.
3. Paralysis, or Palsy.
4. Hemiplegia.
5. Paraplegia.
6. Spasm.
7. Tetanus.
8. Trismus.
9. Catalepsy.

1. Spine.—The spine is the bony jointed column or pillar forming the centre of the back, and commonly called the back-bone. It is *perpendicular* in its position, having, however, four bends, one forward in the neck, one backward in the chest, one forward in the abdomen, and one backward in the cavity

of the pelvis; the upper and lateral exterior of which pelvis consists of the hips. The arrangement of these bends is such, that a perpendicular line would pass through the spine at the upper and at the lower part.

The spinal column consists, in the part above the hips, of twenty-four distinct bones called *vertebræ*, which are articulated one into the other. There are seven in the neck, called *cervical; twelve* in the back, called *dorsal;* and *five* in the loins, called *lumbar*. The bony part of the spine between the hips is called the *sacrum*, and the small pointed termination of the spine, *os coccygis*.

2. Spinal Curvature.—This is a deviation from the natural perpendicular direction.

3. Paralysis or Palsy.—A *total* or *partial* loss of power of motion, or of feeling, or of both.

4. Hemiplegia.—*A palsy* of a *lateral half* of the body.

5. Paraplegia.—A palsy of the *upper* or *lower* part of the body.

6. Spasm.—An action of the muscles which are usually *dependent on* the will, *independent of* the will.

7. Tetanus.—A fixed convulsive action of all or of part of the muscles, dependent in their action upon the will.

8. Trismus.—A fixed convulsive action of the muscles attached to the lower jaw, so as to keep it immovable.

9. Catalepsy.—A total suspension of sensibility and voluntary motion, and often of mental power: the limbs remain in whatever position they are placed.



Engraved by W. T. Warner from a Cast.



Engraved by W. H. Kearney from a Cast.

Emma Hood, aged 20 years.

CASES, &c.

Case I.

The Case of Emma Wood, *by Dr. Harrison, Mr. Thornber, and Dr. Scrny.—This Case came under treatment in January*, 1835.

History.

Emma Wood, aged 20, is of delicate constitution, only three feet and eleven inches in height, her figure greatly twisted, bending very much to the right. The thigh and the leg of the same side are longer than their fellows, so that, when on her feet, she rests chiefly on her right limb. The elbow and wrist joints are much contracted inwards, [see wood cut No. 1,] forming nearly



[WOOD CUT No. 1.]

a right angle, and have little motion: the fingers are bent, and pressed close into the palm of each hand: the knee-joints, which

she can move but little, and that not without some effort, are similarly contracted. The skin around these joints is dark, mottled, and, as it were, tinged with blood. The shoulder, hip, and ankle-joints are more flexible, but are painful if moved freely.

She is and has been, for the last seven years, unable to stand or walk without aid.

During the last *six months* the power of swallowing food, except in small pieces, has become more and more lessened; and she is unable to sit in an upright position for more than half an hour at a time.

Appetite very small; bowels constipated, frequently requiring medicine; menses not regular; urine discharged with great difficulty, and in small quantities.

On examining the spinal column, it presented a semilunar arch to the left, [see wood cut No. 2,] the hollow being to the right.



[WOOD CUT No. 2.]

The vertebræ were luxated: the spinous process pointing towards the hollow, the transverse process being depressed on the same side. The ribs were thus forced outwards, forming an elevated arch, [see wood cut No. 2]: the small of the back preternaturally hollow: the figure being bent so much to the right that the spine of the ilium, on the same side, is forced under the false ribs. [See wood cut and plate No. I.] The chest is much twisted, the right shoulder and the ribs on the same side being thrown forward; and from this disposition of the breast the left *mamma* appears considerably smaller than the right. [See plate No. II.]

Such *were* the appearances.

History of the Case.

Emma Wood was attacked first with weakness in the joints, when six or seven years of age, attended with great pain, especially in the hip, generally commencing at night in bed. This pain was so severe, and her screams so loud, that her mother was obliged to inform the watchman of the cause, that he might not be alarmed. The sensitiveness of her body was then such that the lightest covering produced great pain and oppression.

In this state she continued with little interruption more than three years; in which time the joints had become contracted, as before described.

During this period she was seen by many eminent medical men: in 1822-3, by Mr. V. frequently: by Sir ——— once; by Mr. M. twice, and by Mr. S. frequently.

In 1825, she was admitted into Saint George's Hospital, under the care of Mr. J., acting for Sir Everard Home. Warm baths and frictions were used; but, after remaining seven weeks, her health became so much worse that she was advised to go into the country.

Dr. C. saw her in 1826, at the Aldersgate Street Dispensary, and pointed out the case to several medical men, declaring, that every joint in the body was more or less affected, and that nothing could be done for her.

In 1828, she began first to express an unwillingness to walk, complaining of weakness in the loins and of numbness in the lower limbs: these symptoms rapidly increased, so that, very shortly afterwards, she became unable to stand alone upon her feet. About this time her mother perceived that her figure was bent to the right side.

In 1833, she obtained admission into Saint Thomas's Hospital, under Dr. R., where she remained two months: thence, by his recommendation, she went to the infirmary at Margate, where she had the warm sea water baths. Afterwards to Bath, and was seen by Dr. B. and Mr. K. and returned home in 1834, in a state of health, worse than before.

During this whole period no medical man, who had been consulted, *examined her back.*

On January 15th, 1835, she was brought under Dr. Harrison's mode of treatment.

Progress of Cure.

On May the 1st, fourteen weeks after Emma Wood had commenced the treatment, a considerable improvement was perceptible. The hollow in the loins had considerably diminished, and the spinal column had increased in length more than two inches. She has greater power of *motion* both in the wrist and the knee-joints, and the mottled dark complexion of the skin around these joints has nearly disappeared: the skin generally has much improved in clearness and colour.

January 1st, 1836.—Emma Wood has continued improving. The chest has, in a great measure, lost its twisted appearance: the ribs, on the left side, which were huddled together, have some intervening space between them: the fingers, formerly pressed into the palm of the hand with such force that the nails wounded the flesh, are now removable: all the joints are more flexible, and the skin is much clearer and brighter.

This case, from the commencement, was under Dr. Harrison, myself, and Mr. Thornber, but the latter gentleman became after-



Engraved by W.H. Toarney from a Cast.

Grant Richard Esqr.



Engraved by W. H. Kearney from a Cast.

wards the chief attendant for two years, we occasionally calling, when Mr. Thornber became unwell about September, 1837, at which period Dr. Harrison requested me to take charge of the case. To do justice to Mr. Thornber, I ordered a fresh cast to be taken, that he might be gratified with the progress that had been made during the time of his attendance. From this period Emma Wood has been under my care; and as it has been a very extraordinary and a difficult case, the progress has been going on slowly, the machinery having been obliged to be frequently changed: the result has been favourable beyond all possible expectation, as plates III. and IV. will demonstrate.

April, 1840.

Case II.

A Statement of the Spinal Case of Master Michael Halliday, *Cured by Dr. Harrison and Dr. Serny.—Written by Mrs. Halliday and her Son.*

Having been requested by several of my medical friends to write a statement of my son Michael's case, I am desirous of complying with their solicitations to the best of my power. He had the measles and the hooping cough, one after the other, and then caught the ring worm at school, after which he was at home for sixteen months, during which time he had a great variety of remedies used, and some very painful ones, under the best medical advice.

On the 9th of July, 1835, he first complained of a violent pain in his back, just below the shoulder blades, on the spine: though very patient in general in bearing pain, it was so violent that he cried for some hours during the night with it; at times it became easy. The next morning I sent for a medical man, who gave him some medicine, and during the day he seemed better; but the suc-

ceeding night his rest was disturbed again by pain, being easy in the day. The third night was still worse, and a little ease was procured by applying a mustard poultice several times, and keeping it on as long as he could bear it. For three more nights he suffered great pain, and this continued more or less for a fortnight; he then, for a few days, suffered less pain and rode out several times in a little donkey chair, and it was proposed that he should take a journey with his aunt into Devonshire; but, on the 29th, the pain returned, which decided me in not allowing him to take so long a journey in a coach, and he continued from this time, sometimes in great pain and then tolerably easy, till the medical attendant, not knowing what to do, advised my taking him to the sea for a little change, thinking it might be a nervous affection. On the 6th of August I went to town with him, and, by the introduction of a medical friend, Michael was taken to an eminent surgeon. He told me that the sea would do him no particular good, that his was some affection of the spine, and he made an issue in the nape of the neck which he desired me to keep open. As I was prepared to go to Ramsgate by a steamer, and poor Michael seemed to wish it, the surgeon said, I might take him for a fortnight, but he must lie on a sofa and take no exercise. My elder son went with us, and it was very singular that Michael never had a return of pain: he enjoyed the voyage exceedingly, and he slept quite well that night. After a few days his brother took him out several times in a boat, and, by the end of a fortnight, he appeared quite well, and we then returned to town, when the surgeon saw him again, and thought him very much improved in appearance. He examined his back very minutely, and finding a spot where Michael had first felt the pain, rather tender to the touch, he made another issue on it; at the same time he said there seemed no objection to his going to a private school, where his health would be attended to, and he was not allowed to jump or run about; accordingly I took him to a school at Blackheath, on the 22nd of August, 1835. He continued pretty well, so that I had favourable reports of him, both from the school and from several of his relations who went to see him; and, on the 22nd of December, he came home for the

holidays. I own, when I saw him, I felt much disappointed, after the accounts I had received, to see him looking very ill, and not at all grown in the four months; however, he made no complaints, and went several times out skating, and, no doubt, had several falls. On the 10th of January, 1836, he was laid up with a broken chilblain for a fortnight, and when he began to get about again, observations were very often made upon the awkward manner in which he used his legs, and I consented to his learning to dance at school, that he might learn to walk better. On the 30th of January, Michael returned to school, and, finding the dancing master giving his lesson, he went into the room, but the first time he was set to jump he fell flat on the floor, and the master directly said, he was sure there was something the matter with his legs, or he would not have fallen down. No notice was taken of it, till, in the course of three or four days, the poor boy found his legs and feet affected with numbness, and that he could not get about without holding by the tables and the chairs; the master then sent for his medical man, who began to treat it for rheumatism, although Michael had not the slightest pain to denote such a disorder. On the 7th, the master wrote to tell me of it, and, my eldest son being in town, I desired him to go to Blackheath and fetch his brother, and take him to the same surgeon who had seen him before. On the 10th, Michael was brought down to Epsom, unable to walk without support; the surgeon had made two more issues, and desired that he might recline a good deal on the sofa; but not specifying particularly in what manner he was to lie, he was permitted to suit his own convenience, and chiefly rested on his left elbow, to leave his right hand at liberty to use at pleasure. For his greater comfort and convenience, I had some crutches made that he might move occasionally; and, in this way, he went on till April, when I borrowed a wheeled garden chair, in which he could sit and guide himself, while some one pushed it behind; and in this he used to go out as long as he could support himself upright. I mention these circumstances, because I had reason to think afterwards, that they very greatly increased the injury that was going

on in his back. On the 9th of July, I was first urged by a neighbour to take Michael to Dr. Harrison, as I became very uneasy that nothing was being done for him; but having received very kind attention from several medical friends, I did not like to do it without consulting them, and, therefore, wrote to one for his opinion. The answer I received was, that Michael's case was not of that nature which would render Dr. Harrison's plans available; but, if I wished further advice, he recommended taking him to some eminent surgeon. At this time Michael's state was truly deplorable; he had entirely lost all feeling from about the middle of his body downwards; he could not tell when his legs were pinched; his bowels never acted naturally; and, when aperient medicine was given him, he was unable to restrain the operation for convenience, and had, at times, a difficulty in passing water; yet, after the troubles of the day were over, he appeared in good health and spirits, his appetite was good, and he slept well; but he was growing every day more deformed, from the upper half of the body increasing in size, and the lower part decreasing. In this state I took him to another eminent surgeon, upon whose medical skill and kindness I could most fully rely; I saw that he thought very badly of the case, and did not differ in opinion from the one who had seen him before. He advised me to take Michael to the sea, and let him have warm sea bathing three times a-week, and ordered him a steel to wear on his back; but it was evident to me that little hope was entertained of his recovery, and I returned to Epsom very much depressed. As Michael could no longer sit up in the chair, we procured an invalid carriage, in which he could lie his whole length and be drawn out; and, on the 16th of August, 1836, I went with him to Little Hampton, sending the carriage down that he might have all the advantage of sea air, for I took a man servant to lift him about and attend entirely upon him, and implicitly obeyed the directions given me, and never left him myself for more than an hour at a time. The issues were all this time kept open, and were renewed occasionally by the medical man at Little Hampton. He also dosed the poor boy with medicine, persuading me that

it all arose from derangement of the stomach, and when he had set that to rights he would recover the use of his legs. We went on in this way till the 5th of October, and then returned to Epsom, with poor Michael much worse than when we first went. Two of my neighbours, having relations under Dr. Harrison's care, now again urged me to go to him, and also lent me a book of his to read, and as I found some cases, which appeared very similar to Michael's, I determined to go to town, and see Dr. Harrison, and fairly state the case, and ask him if he thought he could do anything for him. The doctor was very candid, and would not give any opinion without seeing him, but could not appoint a day till the 18th of November; on that day I took Michael up for examination, and the result was, that I consented to place him under Dr. Harrison's care for *six weeks*, by which time he said he should be able to decide whether it was likely he could make a cure or not. Dr. Harrison assured me nothing would be done which would cause the least pain, or be particularly disagreeable to Michael; that his plans were merely mechanical, and that he gave no medicine, and desired no concealment: he also told me plainly, that there was a good deal of apparatus necessary, which was expensive, but even that he would make as reasonable as he could, and he himself lent me the use of a crib for six months. On the 28th of November, Michael was first put under the treatment, and it was with no little anxiety that I watched the process, which appeared to me very formidable, but which I soon found had nothing unpleasant, painful, or dangerous about it. The confinement of lying constantly on his back was a little trying for a few days, but by no means painful, and he very soon became accustomed to it and slept perfectly well. An experienced nurse came to rub him for an hour every day, and the Drs. Harrison and Serny came every third day. In about three weeks time there appeared such an improvement in the *sensation*, that Dr. Harrison said there was every prospect, he could confidently assure me, that Michael would recover. At the end of six months he could just move his foot, so as to be perceived that he did move it, and I took him

into the country, having hired a very good nurse to rub and attend him, and took him to town about once in two months for Dr. Harrison and Dr. Serny to see, and they pronounced that he was going on well. It is not necessary for me to enter into any description of the mode of treatment, as that may be learned from Dr. Serny, 24, Holles Street, Cavendish Square. It was on the 30th of May, 1837, that we left town, and his state then was, that he had recovered his feeling, his health was good, his bowels seldom required the aid of medicine, his command over himself was perfectly restored, and he could move his feet; and, with some effort, early in the month of July, cross one over the other. From this time the progress towards perfect recovery was gradual, and, I should say, that, by the end of the twelve months from the time Dr. Harrison and Dr. Serny undertook the case, *all power of motion was quite restored;* but the bones in the back, which had projected, were not perfectly reduced to a level with the others; and, for this reason, and for fear they should again give way, he was continued under the same treatment till the 1st of December, 1838, and then his back being pronounced cured, a part of the treatment was laid aside, and he was rubbed with a strengthening liniment for six months. At the end of April, 1839, I took a lodging in town; and, on the 1st of May, 1839, Michael had his shield taken off, and stays with steel supports put on, and with the assistance of Dr. Serny and another person, he was allowed to walk for ten minutes. It was not to be supposed that he could walk well or easily, after being two years and a half entirely on his back; but all that seemed requisite was practice in the use of his legs. There was no want of power to move them. For some time he was allowed to walk only once a-week, and then every sixth day; and so on, by degrees, till near Christmas; after which time, he entirely left his couch, and walked with perfect ease two or three miles in the day; and, in February following, he was so perfectly restored to health, as to be able to undertake a situation, where he continues writing for many hours, and generally walks some distance daily without feeling the slightest inconvenience.

Case III.

The Case of Sarah Hawkes, *by Dr. Harrison, Mr. Hoyland, and Dr. Serny.*

November, 1831.—Sarah Hawkes, in the 14th year of her age, is small, and of delicate constitution. She was afflicted with a most extraordinary contortion of figure, amounting to almost the highest degree of deformity. [See wood cut No. 3.] The inferior extremities, which have wholly lost the power of motion, have their sensibility morbidly increased. The toes are turned inwards, and press upon the soles of the feet [wood cut No. 3, A] with such firmness, that they cannot be moved, even by considerable force; the nails not having been properly cut from the commencement of the ailment, and not at all for these last three months, in consequence of her being unable to bear the handling of them for that purpose. The hip, the knee, and the ankle-joints, are stiff and immovable; the knees [wood cut No. 3, G] and the ankles resting firmly upon each other respectively; the right arm [wood cut No. 3, D] is lodged between the thighs, with the hand turned upwards; in this manner it has been confined during the last two years. Her trunk and lower extremities are retroverted to such a degree, that the feet rise above the left shoulder, and can there be laid hold of by the patient with her left hand. The fore part of the trunk and the inferior extremities describe together, as will be seen by the wood cut, more than three quarters of a circle. The fore part of the crest of the right ilium actually passes five or six inches under the edge of the sternum. The right buttock is forced under the scapula of the same side. The middle of the spinal column presents the shape of a horse-shoe, with the fore part of the shoe slanting upwards, and the back part turned into the right flank. In this strange and distressing position the patient is obliged constantly to remain; having lived, for the last two years, entirely upon milk, and the pulpy

parts of fruit, either fresh or dry. The pulse is feeble; appetite languid; respiration always difficult, but more so when the at-



[WOOD CUT No. 3.]

mosphere is moist, or any one stands near her bed. Her voice is weak, and the utterance of a few words exhausts her. The right

cheek and the arm of the same side frequently assume a blackish hue *simultaneously*, and, on these occasions, breathing becomes so laborious and irregular, that death is expected every moment, and sometimes appears to have actually taken place. Her breath emits at all times a disagreeable odour: the heart also appears to be raised considerably from its usual site, and frequently palpitates, conveying a very uneasy sensation, which she herself describes as a violent fluttering in the upper region of the chest.

On account of the awkwardness of her posture, the *urine is necessarily received upon folded cloths;* and she is frequently called to void it. This fluid is very offensive; she knows, however, when it escapes; and can, for a few seconds, retain it.

The *fæces are discharged, involuntarily and unconsciously, upon the right cheek; and, if not prevented would glide into the mouth, the head being fixed immovably to the sternum.* The evacuations are always dark and fœtid; when solid, of large size, being retained longer than usual, in consequence of the sluggish action and the insensibility of the rectum.

She herself accounts for the origin of this distortion from the circumstance of having received on the neck, from the fist of another person, a blow of so violent a description as to drive her over a form, when she fell down in a fainting fit. On recovering her senses, and attempting to eat her dinner, she was alarmed at finding a difficulty in swallowing, and by perceiving an unusual lump in her throat, both of which still remain. In the front the lump is very conspicuous, and nearly the size of a pullet's egg, cut in two lengthwise. The posterior surface is uneven; but there is a particular indentation in the lower part. The cervical vertebræ are huddled together, forming an irregular tumour. By these subluxations, or misplacements, the chin is pushed over to the left, and made to rest continually upon the chest.

In little more than a week after the violence alluded to, five or six fits of a similar nature were experienced. Soon after the first she had pains, attended with cold and heat, in the loins, and lameness in the right hip. These continuing to increase, she was compelled, after several ineffectual struggles, to confine herself to bed, on August 28th, 1828, and never, since that period, has she been

able to rise. About five weeks after she was thus confined, she was visited with a peculiar and indescribable sound in her back and head, resembling the cracking of the fingers, or the snapping of a stick—the report being distinctly perceptible in the room below. It began at the bottom of the spine, ascending rapidly to the lower part of the neck, accompanied by an increase of heat through its course; this was again, however, quickly followed by cold in the same parts: arrived at the neck, the noise was there loudest.

At this epoch the right arm became violently agitated; the left was suddenly drawn back, with the fingers bent and stiff; the eyelids opened and shut in quick succession; vision became indistinct, and the voice failed. The chin was forced upon the breast with strong convulsions, while the mouth remained wide open. After the pause of a few seconds, the snappings darted again into the back of the neck; now ascending to the top of the head, where they suddenly stopped, making, at the time of their cessation, an unusually strong report. The mother of Sarah Hawkes described the course of these noises with the greater confidence, because at night she lay with her own head close to that of her child, in order the better to trace the order and the movements of this singular phenomenon. When the noise reached the head, it was accompanied by greater heat than elsewhere, (perceptible to other persons besides the patient), and a greater degree of cold invariably succeeded. The vertex and the sides of the head were also, for a short time afterwards, so benumbed and insensible, that she could not feel a smart stroke or pinch inflicted upon any part of them.

In this way the rattling continued, incessantly harassing the poor girl for more than a month; at the end of which it entirely ceased. On first hearing the sounds, (and for sometime afterwards,) her mother was so fully convinced of their proceeding directly from the ribs, or from the vertebræ rubbing against each other, that she frequently turned the child, expecting to see an evident movement in some particular part, and thus ascertain the exact spot, whence the noise proceeded; but these examinations always ended in disappointment, for neither she nor any other person, after bestowing the greatest care and vigilance, could per-

ceive the slightest disturbance, either in the spine or the ribs. Both were, at all times, tranquil. No unusual motion could be observed or felt, although the crackling was audible enough, and, apparently confined to a particular spot, to which eyes and fingers were both directed.

After this perplexing symptom had taken its departure, she became *constipated in her bowels.*

During twenty-nine successive days no alvine evacuations took place: the abdomen became exceedingly swollen, and was very painful, while there was a remarkable glistening of the integuments. About the same time she was attacked with frequent spasms in the face, eyes, and right hand, but most of all in the mouth, the chin being now drawn down upon the sternum, where it remained fixed for fifteen weeks and three days. During this period she lay speechless, with her mouth continually open, excepting when forcibly closed with a bandage. It at last *suddenly and spontaneously shut;* and, in the course of an hour, she was able to speak a few words.

This attack was scarcely over before the body, and, after it, the limbs, began to *bend backwards;* but there was no return of the fits, cramp, or spasms. Her deformity, increasing for three months, at length attained its present magnitude. From that time matters have remained nearly stationary; and, during the whole period, in spite of her melancholy and helpless situation, the general health has remained unimpaired, with the exceptions already mentioned. In the course of her confinement she was *bled* repeatedly in the arm, and had *setons*, *issues*, *blisters*, and *leeches*, successively applied to different parts of the back; but neither they, nor any of the routine means usually employed, at all relieved the symptoms, or retarded the progress of the complaint. Before she left her native place, (Dunmow), she was examined by not less than forty medical men, some of whom went from the metropolis, and more distant places, for the purpose; she had been removed to London, and exhibited there upwards of a month, before Dr. Harrison heard of her. The first object of this journey was partly to obtain alms; but chiefly to procure, if possible, some alleviation of her afflictions, through the benevolent exertions of the faculty. An amiable

young lady, whose figure Dr. Harrison had restored, (by which means she had been rescued from pulmonary consumption), informed Dr. Harrison of Sarah Hawkes, and desired him to "visit the poor girl, as an object of compassion and wonder," not having the slightest idea that any relief could be administered.

DR. HARRISON, HAVING CAREFULLY EXAMINED INTO THE CASE, UNDERTOOK THE CURE.

November 15, 1831.—He commenced the treatment, by thrusting folds of soft linen between the knees and the ankles, in order to separate them. On the day following he could stir the arm a little. Upon the 19th, the limbs being considerably parted, he had the pleasure of removing the arm from its long imprisonment; but so great was the pain, upon taking it from its confined situation for a few minutes only, that she *urgently desired to have it replaced.* Having disengaged the arm, Dr. Harrison directed his attention to the back, in order to ascertain the extent of the deformity, and devise appropriate means of treatment. Upon turning her over for this purpose, great irregularities were found in all the cervical vertebræ; one of the lower was driven forward, leaving an evident hollow behind. He resolved upon stretching the neck, hoping by this measure to replace all the vertebræ, an experiment, which led to the immediate restoration of the natural state and the appearance of the neck.

Frictions, from the first, were almost continually applied to the arm and the scapula, in which parts the power of motion was rapidly increased; and, on the 22nd, (seven days only from Dr. Harrison's beginning to attempt relief,) the arm was finally released, and restored to perfect liberty; and, though weak, she could move it in every direction, as well as the other.

November 24th.—Sarah Hawkes was this morning carried from her bed, (where she had lain, without removal, curved in her body and limbs, as described, for more than *three years,*) and, soon after the removal, she *threaded a needle with her right hand,* which had [wood cut No. 3, D] been fixed between her thighs.

27th.—She had been turned upon her face for the three last days, in order to permit a sketch to be taken of her back, as well as to have it and the cervical vertebræ well rubbed. In this

posture she remained for six or eight minutes, the first time, and has borne the change better upon every repetition. The tumour of the cervical vertebræ, on the outside, is entirely reduced, and the neck sensibly elongated. She now swallows with ease, and says that the lump, which she had felt in her throat from the time of receiving the blow, has, since the extension of her neck yesterday, the 26th, quite subsided.

30th.—Has eaten two boiled eggs, and bread and butter several times, with great pleasure.

A shield was yesterday forenoon placed upon the back, and confined *in situ* by means of a pair of stays. The unnatural and unsightly hollow of the back was filled up (almost entirely) with linen and tow. The hollow of the back is already diminished, and the front of the body is straighter. There is great tenderness in the whole spinal region.

December 8th.—Since last report she is, in every respect, much better. She can now move freely every large joint of the lower extremities, and, to a considerable extent, in whatever position she may be lying. The right arm and hand have, for several days, been quite well, and the protuberance in the left side of the abdomen, is nearly gone. The hollowness in the loins is also much lessened, and the muscular enlargement on the left side of the spine has almost disappeared. The tenderness of the back too has nearly subsided, for she can now bear to have it smartly rubbed for a considerable time, and even derives pleasure from the operation. She is in good health, is more plump, and generally much improved in appearance; sleeps well, and swallows with perfect ease.

December 20th.—The patient is, in every respect, better; the limbs have freer action, and the fore part of the trunk exhibits but little deformity. The lumbar hollow is also reduced; the muscular enlargement is nearly gone; and the only tenderness remaining is over the eighth dorsal vertebra, where *the seton was formerly placed*, which had been kept open seven weeks and then dried up, without having afforded any relief.

January 10th, 1832.—She daily improves: has the proper

feeling and the free use of all her limbs. The right arm has, for some time, recovered its natural strength; but, though the lower limbs are active, they are still weak. The only defec tremaining in her back is a slight curvature in the lower dorsal and upper lumbar portions of the spine, with a slight hollowness on the left.

February 12th, 1832.—Her health continues excellent: she sleeps well, and increases in flesh. The slight remaining curvature is confined to the three inferior dorsal vertebræ, which were formerly the most distorted.

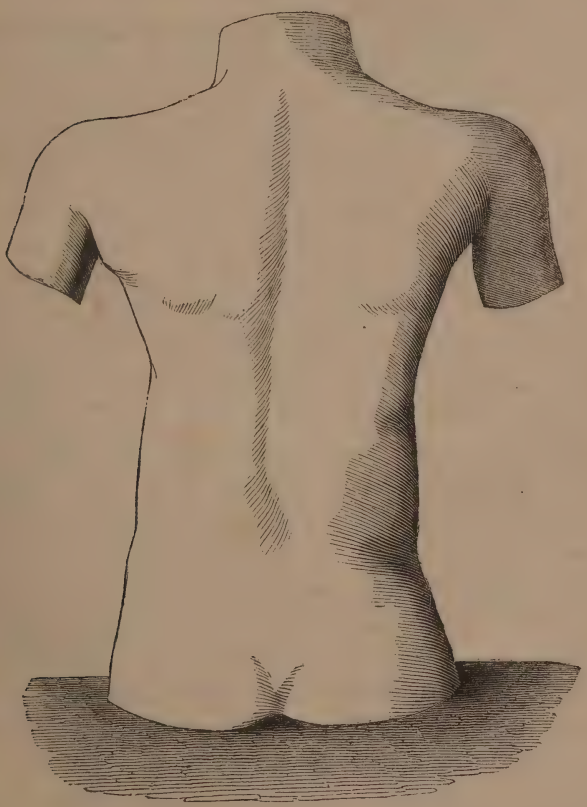
The feet have recovered, and, to all appearance, have regained sufficient strength to sustain the whole weight of her body; though the right, (which was always the weaker), is still more infirm than the other.

May 8th.—Of late there has been no perceptible difference, either in the strength or the activity of her limbs; attention has, therefore, been chiefly directed to the vertebræ. Two of the vertebræ have, for some time, been wholly replaced; but the middle one, (which formed the top of the præternatural arch), having still resisted the means employed, and continued a little out of the line, means were employed by which the vertebra was compelled to enter the column, and was restored to its natural situation. Under this treatment the recession daily became less, and the replacement easier; rectification proceeding until the bone resumed it proper and permanent place in the spinal column.

July 24th, 1832.—Since last report the vertebræ have remained stationary. The spinal column has also been repeatedly examined, both before she left the crib and after returning to it, by experienced practitioners, several of whom were entire strangers to Dr. Harrison, and was declared to be perfect. Sarah continues to enjoy excellent health: she has walked for a few minutes in her room six different times, at intervals of a week: she has the unrestrained use of her lower extremities, moving them freely in every direction, both in bed and while on foot.

Sarah Hawkes was attended by Mr. C. W. Hoyland, surgeon, for three years, under the superintendance of Dr. Harrison, till the year 1833, when it was perceived that her deformity

was returning, as one of her legs had become shorter by one inch, which had been occasioned by a fall in walking. By Dr. Harrison's special desire she was placed under my care, to undergo the treatment over again for two years. I at first immediately replaced the sixth dorsal vertebra: she experienced two attacks of typhus fever, each accompanied by the discharge of an abscess inwardly, from which her constitution suffered greatly. Sarah Hawkes is now perfectly recovered, in good health, and able to walk several miles, and is not a little proud of her figure. [See wood cut No. 4.]



[WOOD CUT No. 4.]

Case IV.

The Case of William Sutton, *aged 37 years, residing at 3, Petty's Court, Hanway Court, Oxford Street, by Dr. Serny.* A Spinal affection, attended with loss of use in the Legs.

This patient, when walking, May 2, 1836, over a cellar flap, fell through into the cellar, and came down on his feet; the distance he fell about nine feet.

The shock, his weight being 196 pounds, caused a feeling of stupor, which rendered him for a short time unable to move. The stupor having disappeared, and feeling nothing except that his left ankle was sprained and very painful, he proceeded to his work. The following morning his loins were very painful and stiff, and he could not stoop: he experienced also great pain down the outside of the left leg and round the ankle, with shooting pains to the toes. The day after he was still worse, being obliged to keep his bed, being unable either to sit or stand. Mr. H. was consulted, who called the disease rheumatic fever, and did not regard the fall at all connected with it. Mr. H. attended the patient nine weeks, who was then able to walk about a little, but had still bad pains in his loins, which now returned worse than before; and, in a few days, he again became unable to sit or stand; indeed, was quite helpless, and was taken to St. Bartholomew's Hospital, and remained under the care of Dr. R. for two months. He was then treated for rheumatism, hot baths every other day, with cupping, blisters, and medicine containing colchicum. Becoming no better he returned home, and was attended for six months by Dr. P. of the Bloomsbury Dispensary, who used the same treatment as that adopted at the hospital. Not recovering him, Dr. P. resigned his patient, who was attended by Dr. E. of the Westminster Dispensary. Dr. E. treated him for two months, when, finding no beneficial change, he examined him more minutely, and declared

the *spine to be affected*, and resigned the patient to Mr. S. the surgeon to the dispensary. Mr. S. ordered needles to be used in the loins, a blister over the same part, and then a seton, which was kept open two months.

During the whole of this period, the patient could not use his legs, which were destitute of feeling and deadly cold; when his bowels acted the pains in the loins were agonizing; his water was thick and of a very unpleasant smell. Mr. S. at last stated, he could *do nothing more for him*, as he was paralysed.

In the two following years, William Sutton was under the treatment of several other practitioners, but derived no benefit.

At length, by the assistance of a few friends, he was placed under Dr. Serny. In nine weeks, after commencing his treatment, his limbs obtained their natural feeling, the pains complained of had disappeared, and on September 1st, 1839, he was pronounced well, his back being restored to its natural condition.

This case is highly instructive. Here is a patient treated for years for a rheumatic affection: every means used to relieve this affection, under the guidance of the most enlightened members of the profession, and these means are used without *any reference to the origin of the malady*.

One physician, at length, is led to suspect that some affection of the spine exists: he is satisfied that it is so: the patient is transferred to a clever surgeon, and the usual surgical treatment is adopted, but without success.

The patient is then placed under Dr. Serny's care, and health was rapidly restored.

Case V.

A Case of Catalepsy, *effectually cured, by curing the Spinal Column, by Dr. Harrison and Dr. Serny.*

Lady G. T——, aged 16, is unable to sit erect, or to walk continuously more than a few paces; always leans forward, drags her limbs in walking; pulse small; appetite defective and irregular; menses have observed their natural periods for more than two years; bowels generally constipated.

On looking at the naked back, a *slight lateral curvature* was discovered, of the usual character. All the lumbar and *three or four of the inferior dorsal* vertebræ were unusually protuberant. They more than filled up the lumbar hollow, which actually projected, and the elevated spine was very tender.

Lady G. T——, has, for the last five years, been a constant invalid, and imputes her bad health to several causes; first, to a violent wrench in the loins, while riding on horseback; soon afterwards, she was precipitated to the ground from an elevation of several feet; lastly, a chair being hastily removed, when in the act of sitting down, she fell upon the floor, and was much bruised.

In October, 1835, she was seized at church, during the service, with weariness, dizziness, and great debility, followed by sickness. She was immediately carried home, when she fainted, and remained *insensible for four hours*. During this whole period she had neither feeling, consciousness, nor the power of motion. Moreover, the body, the arms, and the legs, when put into any position, *retained* it until they *were forcibly placed in another*. On recovering, she complained of pains in the *back part of the head, and along the spinal pillar*. For the general indisposition and weakness, which remained after the paroxysm, sea bathing was tried.

About two months afterwards, a second fit came on suddenly, accompanied with the same symptoms as the former. It continued

sixteen hours. This attack was preceded by pain in the head and the loins, heaviness, intolerance of light, and, finally, she fainted immediately before the invasion.

In the evening of May 22, 1836, a talented and well informed medical practitioner was suddenly called to visit Lady G. T——. He found her lying on the bed motionless and insensible; she was faint, moaned, and laboured in breathing; pulse 78, rather full and soft; pupils dilated, with the eyes turned upwards. The body, the arms, and the legs, continued in whatever posture they were placed, until moved by some one. In this helpless condition she continued seventeen hours, unconscious of everything around. On her faculties returning, she complained of fixed pains behind the ears, and whole occiput; she complained also of pains in the loins, the thighs, and the ankles, with inability to remain erect for a few seconds. The knees were very weak, and, on two occasions, she fell down suddenly in crossing the room, without any known cause.

During the fit she was, among other things, cupped on the occiput, and cold lotions were applied to the head. In a few days the urgent symptoms were removed. Her medical attendant now proceeded to examine the spine, and found an outward curvature of the lower dorsal, and all the lumbar vertebræ, with considerable tenderness on pressure. The right scapula was elevated, and the spine between the shoulders turned a little towards the right. Having made these discoveries, he gave it as his decided opinion, that all the symptoms were referable to the state of the spine. Recumbency was strongly urged by him, with a view to relieve the deformity, and thereby remove pressure from the nerves.

In consultation with this gentleman, a few days after the last paroxysm, the usual treatment for removing distortions of the spinal column was recommended, and immediately adopted.

July 5, 1836.—A shield was fixed over the spinal pillar, and the usual practice commenced.

August 27, 1836.—The lateral curve is wholly removed, and the lumbar hollow partially restored. The tenderness of the loins

is entirely gone, and the health has been sensibly improving from the first.

For several weeks after the treatment was first begun, the patient felt her former symptoms; she had occasional headache, with transient pains in the occiput, and behind the ears, also in the loins and the thighs. They resembled so much the sensations, antecedent to the cataleptic attacks, that, whenever they occurred, she anticipated an immediate visitation of her complaint. They not only returned at longer and longer intervals, but grew fainter and fainter, till they wholly disappeared, leaving the patient in excellent health and spirits.

The back-bone having wholly recovered its natural form, and the loins their graceful hollow, her Ladyship was this day, October 9, 1836, pronounced cured.

She remained constantly upon the crib for six months longer, wearing the shield, and using a stimulant liniment every day. She was, during the whole time, in excellent health, and had not the slightest return of her cataleptic symptoms, nor have they since troubled her in the least.

She was permitted, after this period, to rise from her crib for a few minutes, at regulated intervals, and move about in the room. She walked erect with ease, with her figure, carriage, and appearance much improved. The period for exercise was gradually extended, as the spine acquired strength. She was no longer confined to the house, but rode in the open air whenever the weather permitted. In this way Lady G. T. visibly increased in strength, and has not, during the last eighteen months, once felt any symptoms of her distressing malady. While under the latter part of the treatment, and for the first three months after she arose from the couch, her spine preserved its natural shape and form, unaltered in the smallest degree. About this date the vertebral pillar in the loins began to vacillate; on observing the inclination, her Ladyship was desired to submit more carefully to the rules prescribed for her observance. Continuing to disregard the request made, the obliquity gradually increased. The remonstrances were now more urgently renewed; being only partially obeyed, the spine was further bent; *her good*

looks also gradually faded, and she visibly declined. The complexion, which had for so many months wholly recovered its clear, bright, and fascinating hue, was sensibly deteriorated, becoming more and more pale, sallow, and muddy; it had, moreover, a sickly and anxious expression. Being induced, by these unfavourable changes, to adopt the recommendations given, she again recovered her figure, and is one of the ornaments that sometimes grace the Court of our lovely and hopeful Queen.

Case VI.

A Case of Paraplegia affecting all the Limbs, *and in which the patient had no knowledge or power over the discharge of his fæces and urine, completely cured in six months by Dr. Serny.*

Monday, June 26th, 1837, I first accompanied Dr. Harrison, to see Mr. Brummage, who said that he was 52 or 53 years of age. He had for a long time been the gardener and keeper of Soho Square. He had been a great invalid from a severe wrench in the back, in the year 1832, though he had been ailing, more or less, for the last thirty years, from hard work, and carrying great burdens on his shoulders Pulse regular; appetite very good; sleep natural; bowels seldom require any medicine. I found all the cervical vertebræ greatly projecting outward, so as to make his chin bend downwards upon his breast. The whole of the dorsal vertebræ were likewise curved outwards, forcing or bending the right side in the same direction, and the left inwardly, thereby making the *outward semi-lunar curvature* of the spine, by which position the body became curved forward as well as to the left. Owing to the deformity, he appeared, when he walked, to be in danger of falling on his face and left side. The four last dorsal vertebræ stood more outward than the rest. The whole of the lumbar vertebræ partook fully of the above dorsal and outward

curve, thereby increasing the apparent danger of falling on his face and left side.

He said that he had *no feeling in his hands;* he could *move* but could *not direct them* properly; for example, when he wished to convey anything to his mouth, the hand generally passed to his head or shoulder. His urine and fœces came from him unconsciously, which made his life most miserable; his urine had a very strong ammoniacal smell, usual in similar deformities. His legs and feet were insensible, though he could walk a little; but he could not guide them properly, and they were very cold at all times, even up to the hips. Finally, he was without strength; his hips and lower limbs seemed out of joint, and without feeling; his head was light and giddy, with a sensation of terror, when looking at any object above him.

The treatment commenced as usual with permanent recumbency, on the 26th of June, 1837. He had daily frictions for half an hour along the whole spine with an emollient liniment. When under gentle extension, the parts protruding were scientifically pressed; afterwards they were further confined by the back shield, which was secured in its place with laced stays.

The cervical vertebræ were regularly extended, and then compressed by means of the neck supporter. In the course of *three weeks,* he had *regained the power of his will* over both the urine and the fœces. In four months the *feeling* of his hands and feet was perfectly recovered, and the *ammoniacal smell* of his urine *disappeared* entirely. The usual shield was now applied to the left side, and it extended from the axilla to the hip. It was placed there to remove the semi-lunar curve, which was completely effected in six weeks. A fortnight afterwards, after a close examination, he was pronounced well, and free from all the symptoms under which he had suffered for several years, the treatment having lasted only six months.

Observations.

This is another instance of the complete failure of the old

practice, in the hands of eminent physicians and surgeons, under the most favourable circumstances. Mr. Brummage, the subject of the preceding case, was disabled, by a mere accident, in September, 1832, in the following manner: while digging within the square, and in the act of casting a heavy spade full of earth to a great distance on his right, he received a wrench in the back, and fell down. After a short time he got up, and crawled to a seat near him; in half an hour he resumed his labour, and continued his employment for three months, getting worse and worse during the whole time. At last he became so infirm, that he required a person to lead him like a child. In this miserable condition he applied for relief successively to different medical men; among others to Sir A. C., who said the disorder was in the head, and incurable. He conformed strictly to their rules during the whole period. He went to the Middlesex and the Bath Hospitals, whence he was dismissed unrelieved. He was, moreover, refused admission into the Westminster Hospital, on the *plea that his situation was hopeless.*

Case VII.

A Case of Palsy in the Arms and the Legs, *accompanied with great variations of temperature in the upper and lower extremities, and many other extraordinary symptoms, all of which were cured by applications to the Spinal Column, by Dr. Harrison and Dr. Serny.*

Symptoms.

Miss Marianne Prevost, aged 20 years, is a very great invalid, having symptoms so numerous and varied, that no organ, either internal or external, wholly escapes. When the anguish abates in one part, it begins in another. Her sufferings continually change,

and either their intensity remains, or, if not, they return with increased violence. She has continued in the same miserable condition for the last nine years and a half. During this long period she has always been under the medical treatment of eminent practitioners, deriving only temporary relief.

She feels pain and tenderness in the occiput, with a burning heat, which extends from the base of the head to the vertex. She has, also, a dull, aching pain in the forehead, sharper within at the top of the nostrils, and great weakness in the palpebræ. The right eye is generally bloodshot and painful. The light is so intolerable, that she is obliged to remain in almost continual darkness. When Miss P. attempts either to read or work, the letters, and whatever she is doing, appear to be in constant motion. Hearing is also so acute and delicate, that the mere opening of a door, or the putting down a tea cup, or the passing of carriages along the street, distresses her exceedingly. She has had, for the last four months, frequent darting pains in both cheeks within her jaws, and in the gums, being most distressing and constant on the right side. For the last two months, from this cause, she has been able to take liquids or solids only on the right side. She is likewise afflicted with severe pains in the muscles of the chest and the abdomen, first in one region, and then in another; being experienced over, or near to, the liver, or the spleen, they were supposed to indicate inflammation of these organs, and the treatment corresponded. She has scarcely any power in the arms or hands, and is sometimes obliged to be fed. The arms are generally heavy, being either very cold or burning hot, and then extremely painful. The lower extremities, in particular, are so feeble, that she can only slightly move the toes and the feet at any time. When free from pain they are immovable, and feel deadly cold to herself and others. When in great pain, on the other hand, their heat is perceptible through her clothes. Through the day they require the constant supply to her feet of very hot water in bottles, to make them tolerably comfortable. If it be withheld only a few minutes, the arms, the hands, the thighs, and the legs, manifest a deadly coldness to the patient and to

others. While the heat is applied, moisture pours from the palms of her hands and the soles of the feet in such abundance, as to require the frequent renewal of dry cloths to both. These members are also extremely tender, and uneasy to the touch. The muscles, surrounding the haunches, especially on the right side, are affected with shooting and deep-seated pains, which spread themselves about the hip-joints, are much increased by motion or pressure, and often strike down the inside of the thighs and legs to the soles of the feet. The knee-joints, in particular, and the parts surrounding them, are very tender and painful on being handled or stirred. The ankles often suffer in the same way, but there is no perceptible swelling or redness, or increased heat in either of the limbs, except when they are in great pain. Slight pressure, applied to the bottoms of the feet, produces pain in the small of the back, with uneasiness in the limbs, especially about the hip and the knee-joints. The palms of the hands and the soles of the feet are at night of a burning heat. They are also dry and parched. Every attempt, at this time, to induce perspiration, is unavailing. The voice is extremely feeble. She can speak only in whispers, which are inaudible at a small distance, and is soon fatigued. Respiration is frequently so difficult as to require, for its relief, warm inhalations with vinegar and myrrh. The heart often palpitates, and strikes violently against the chest. Deglutition is made with an effort. Slight pressure upon the windpipe, immediately below the pomum adami, occasions great pain in the forehead, in both eyes, and in the upper part of the nose. Anything pinned or drawn round the throat (however slightly) produces a disagreeable sensation in the part, as also over the shoulders, in the back, in the hind part of the head, and upper portion of the chest. The appetite and digestion are nearly lost, and with them the power of taste. Solid food of every kind is disagreeable: she is generally thirsty, and much troubled with wind. The bowels are uncertain, and the motions offensive. The urine varies much in quantity, and in its sensible qualities. The menses are irregular, and she has at all times a profuse leucorrhæa. The pulse, generally small and feeble, varies much in frequency

and the regularity of its beats, often numbering 120. Seldom has a week passed away, for the last five years, without the occurrence of severe headache of two or three days continuance. The eye-sight and the hearing, always peculiarly acute, are, while the head-ache lasts, unusually sharp and sensitive; the countenance also participates, looking pale, contracted, and distressful. The hair, naturally of a clear bright black, and soft texture, *changes during the pain to a russet brown,* is dry and stiff, feeling more like bristles or horse-hair than the natural covering of a human being. The temperature of the scalp and of the hair is so much increased during the paroxysms, that she cannot bear *a comb* in the hair for even a few minutes, the *acquired heat* of it becoming intolerable. If the servant, while brushing or combing the hair, penetrates to the scalp, and touches it any where, she becomes hysterical, and the skin all over her trunk and limbs conveys an uneasy and indescribable sensation. So great is her susceptibility at all times, that she is thrown into convulsions by any thing that makes her uneasy, or excites her much. Her arms are then tossed about, with her fists firmly clenched, and the lower limbs spasmodically agitated. The eye-lids and the features are in continual motion, the features undergoing such extraordinary and frequent alterations, that her nearest friends would be unable, by merely looking at the face, to recognize her during the paroxysms.

Appearance of the Back.

On examination three of the lower cervicals, and as many of the upper dorsals, were found much too prominent; the lumbar hollow more than obliterated, being much raised up. There was also a semi-lunar curvature, extending towards the left, from the top to the bottom of the spinal column, with great irregularity in the elevation and the distances of all the vertebræ. To these contortions, and their effects upon the muscles, viscera, and nerves, the multifarious afflictions are to be ascribed.

History of the Disease.

In early life Miss M. Prevost was a very delicate and ailing

child, and had completed her fifth year before she could walk, even a few steps, alone. She had several alarming convulsive fits during the first few years. Instead of a natural hollow in her loins, the spinal column from infancy actually projected considerably, making it very difficult to adjust her stays, and confine her clothes at the waist. In attempting to walk she bent at all times considerably forward; was never strong, or able to undergo much bodily fatigue, but was stout enough to enter with pleasure into juvenile amusements, and to enjoy them in moderation. In this state of health she continued till February, 1827. At that period, being nine years old, it was her misfortune, while engaged in play, and running at full speed with another young companion, to meet with the accident which still afflicts her. She was harnessed for a pony race; her conductor, more powerful than herself, pulled at the bridle unexpectedly, and with such force, that she was suddenly stopped, and, unless assistance had been given, would have instantly fallen. The right leg, although it came into collision with nothing, received such a violent jar, that she was obliged to be carried into the house. It was rendered feeble, almost motionless, and, from that hour, has been unable to bear her weight. The outside of her foot soon became very painful, but no discoloration or swelling was to be seen. The weakness increased in her back, especially about the loins. The left leg has ever since been so infirm, that she could move or stand only with the aid of crutches. The pains in the foot were first considered to be *gouty*, and treated accordingly. Soon afterwards the back of the head became so distressingly painful, and hot to the touch, that she applied to the late Mr. ——, of Sackville Street, for assistance. He called the malady *tic douloureux*, and ordered, among other expedients, seven of the *dentes molares* to be extracted. Deriving no benefit, and the symptoms becoming more severe, she, in the following autumn, had the advice of a Southampton practitioner, who ordered the whole *head to be shaved; blisters were successively applied to it*, with leeches to the nape of the neck and the temples. In December she was afflicted with spasms about the region of the stomach. They struck across the body from one side to the other,

and generally returned three times in the day and night. The duration of each fit was about two hours. In the evenings the pains changed their situation, and, fixing upon the heel of the right foot, darted from it to the little toe: the spasms continued the whole of the succeeding summer and winter. In December or January another medical gentleman, in order to make a strong impression, proposed to *dash some warm water* upon her. Being seated in a tub for the purpose of receiving it, as she believed, he hastily and unexpectedly threw several buckets full of *very cold water* over her. She fainted, and was carried, suffering with violent spasms, insensible, to bed. Receiving no benefit from this treatment, he seriously recommended her mother to set *the dwelling house on fire*, to agitate, as he said, the nervous frame of his patient. This advice being, of course, disobeyed, he directed the servants to run about, hurry-scurry, in her room and other parts of the house, with flaming tapers, calling out fire, fire. These and other devices of the same kind, producing no relief, were, at length, discontinued.

These extraordinary contrivances to correct a physical derangement of the frame have been noticed, in order to show the mistaken notions still entertained of spinal complaints by the faculty, and others. The spasms still continuing, in June, 1830, she visited Tunbridge Wells, and placed herself under the care of the late Dr. Yates. He subdued the spasms with bismuth, quietude, and nutritious diet. In July she returned home, stooping forward most distressingly, and scarcely able to crawl about, although supported with crutches. In July, she was seized with fever and delirium, which continued till the following October. She then consulted another medical practitioner, who had her back rubbed every night with mustard and bran. In June, 1832, she returned to Tunbridge, and Dr. Yates then pronounced the complaint to be spinal. He ordered to the back *blisters*, *tartarized antimonial ointment*, and not fewer than *one hundred leeches*. Mr. ——, surgeon, of Golden Square, being consulted, approved of the plan. She returned home in September, where she was occasionally visited by Dr. ——, of Haslar Hospital. This experienced and

eminent physician, believing that the liver and the spleen were affected, directed a mild course of mercury. In 1836, another medical practitioner inserted *two issues* in the loins, and kept them discharging freely for nine weeks. At this period Miss Prevost was placed under the judicious care of Mr. ——, who had the issues dried up, and applied leeches occasionally to the affected parts. He had recourse to morphine and iodine internally. They mitigated, although they did not subdue her sufferings. Afterwards he employed strychnine, with such decided benefit, that it was, at her earnest request, continued several months after she came under Dr. Harrison's care.

Treatment explained.

September 24th, 1836.—The usual mode of cure was commenced by directing the back to be well rubbed daily for half an hour. Compression was then made upon the incurvated spine to encourage its return towards the straight line: a padded shield was then placed upon the right side, extending from the axilla over the brim of the pelvis, and confining it there with stays. A considerable vacancy being in this way established between the person and the shield, the back bone was observed to move sensibly towards the latter. This was apparent, because the roundness of the right side, conspicuous before the shield was applied, became hollow in consequence.

November 8th.— Miss P. being able this morning to lie, for the first time, upon her face, and to permit the back bone to be gently stretched, the treatment was afterwards conducted in the usual way. When it was over, a stuffed back shield, accommodated to the natural form of the spinal column, was fixed over it, through its whole length, to compress the irregular vertebræ.

December 10th.—The figure of the back bone is already improved, and the health also. She has more appetite, and digestion is better performed. The hearing and the eyesight are less acute: talking no longer fatigues: the sleep refreshes, and she is grown stouter.

January 20th, 1837.—The amendment has been regularly progressive from the first. The lower limbs are become warmer, and she can cross her feet with ease backwards and forwards. When she draws either of them upwards, or pushes either of them against a hard body, she feels pain near to the small of her back on the same side. It was at first more severe than of late. The arms have acquired so much strength and activity that she constantly employs herself in working or in reading.

February.—The spinal column is nearly straight, and replaced, except in the small of her back, where it still inclines towards one side.

May 1st.—All the painful and distressing symptoms have entirely left her. She now possesses a good state of health, and an uninterrupted flow of excellent spirits.

July 31st.—The several deflections and irregularities of the spinal pillar, having from the first gradually abated, were this day declared to be entirely removed. The primary treatment was, therefore, discontinued, and stimulant applications were substituted. Since the last report Miss P. has gained flesh, and looks much better. The limbs are *uniformly warm*, have acquired their natural activity, and the strength in both sensibly increases. She is without any complaint, is always cheerful, and in the full enjoyment of excellent health.

October 14.—Since the last report Miss P. has acquired considerable strength and agility in her limbs. She is continually employed in reading or in needlework. Appetite and digestion are uniformly good. She is free from pain, and her sleep refreshes. She is, however, so extremely susceptible to cold, that, unless her rooms be constantly heated, and the body and limbs are enveloped in warm clothing, she feels pain, and tenderness in the fore part of the chest, along the breast-bone, and in the direction of the ribs. The right side suffers most, especially at the upper part, near the clavicle, towards the axilla, and under and beyond the mamma of the same side, but not affecting it. Slight pressure increases the pain and the tenderness. As she has little fever, cough, or expectoration, and no difficulty in breathing, the pains seem to be wholly

confined to the muscular structure of the thorax, and especially to the intercostal muscles. Besides several slight attacks of inflammation, she has lately had two rather severe ones in June and in August. Both were treated with bleeding, blisters, and regulated diet; they were evidently produced by cold. At other times she has been quite well. Her looks have of late much improved. She has recovered the full use of her arms, and the lower limbs are much stronger.

This young lady is now staying at Madeira during the season, and walks out in the island.

Case VIII.

Case of outward Curvature, attended with shortening of the left Leg, *by Dr. Harrison.*

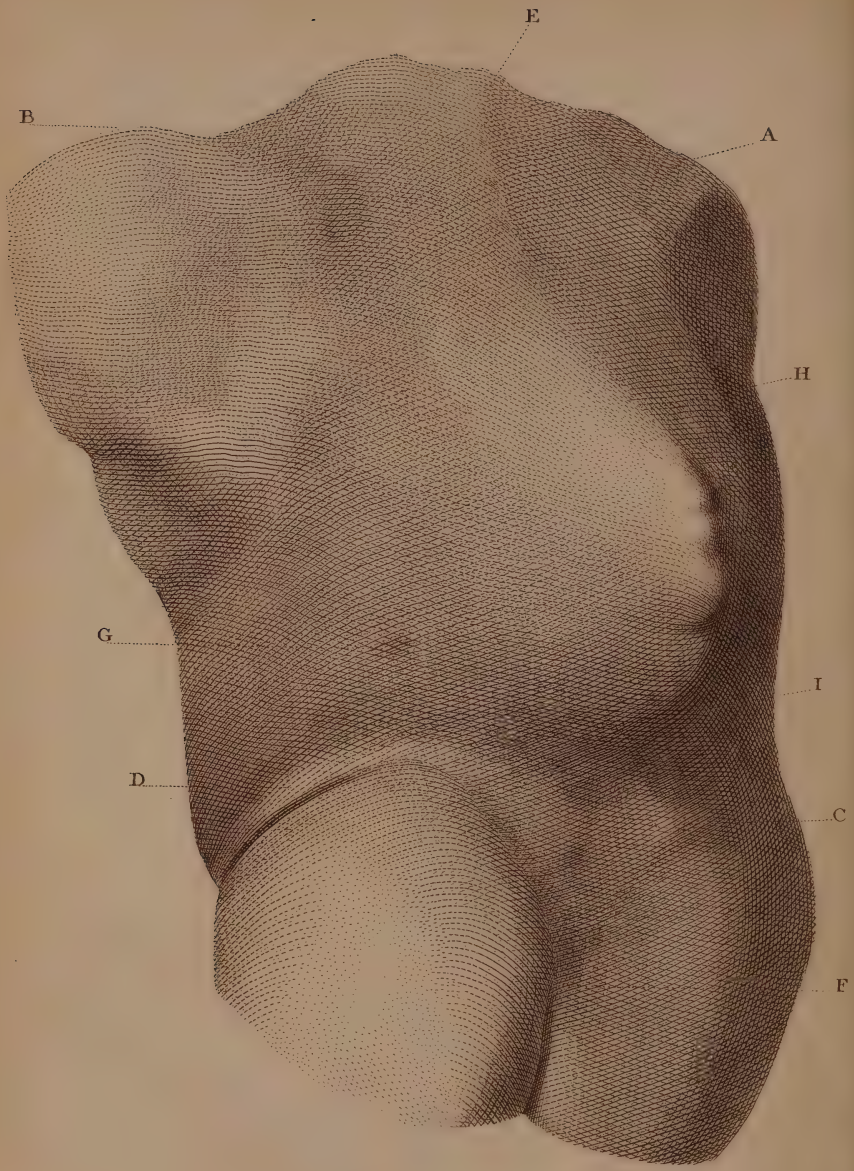
Master George Andrews, of St. Vincent Place, City Road, aged 13, of a florid countenance and fair complexion, leans toward the left side at all times. The left lower limb is *nearly two inches shorter* than the right. To obviate this defect, the shoe sole is stuffed with leather. He is obliged, in walking, to make use of both a crutch and a stick. Eight years ago, he was struck with a stone on the false ribs of the same side, at a considerable distance from the spine. He was much hurt, and being unable from anguish to raise himself in bed the following morning a surgeon was consulted, who advised an embrocation to be applied. The pains were relieved for a few days, but soon returned with equal violence, and extended from the part affected to the bottom of the foot: they have continued to the present time, with little variation or abatement. He has lately been subject to frequent fits of *numbness*, which always begins in the bruised part, and proceeds from it along the same side to the sole of the foot. Many different remedies and applications have been tried, but to no good purpose. About eight months after the accident, one of

the lower dorsal vertebræ was discovered to project a little. The eminence was at first scarcely perceptible, but increased gradually, and others following, the swelling has been enlarging ever since. He has for some time been quite well in health, though soon fatigued, and easily put out of breath. The heart always palpitates violently, and the apex, having been forced out of its natural situation, beat regularly under the third rib. He sleeps well, appetite good, urine and alvine motions natural; has a very aged appearance.

On viewing him naked, I found the *heads* of eight of the upper dorsal vertebræ too prominent, and gradually rising, like an inclined plane, towards the hump. The remainder, with the connected ribs, had formed a large elevated swelling, (see plate V.*) inclining towards the right, seven and a half inches long, six and three quarters broad, and three inches high in the part most raised. Three of the upper lumbar vertebræ assist in forming the lower part of the deformity. The ribs, at their sternal attachments, were very irregularly fixed, and huddled together, especially on the left side, so as to contract the chest in front, and give it a disagreeable appearance. The margin of the ribs on the same side nearly touches the pelvis. (See plate V.) He is four feet in height, and measures twenty-eight inches round his body, at the middle of the hump. His back, from the cleft between the buttocks to the nape of the neck, measures seventeen and a half inches. The affected limb, when *stretched out*, always becomes *numb* for a short time, and afterwards prickles, first in one part, and then in another.

January 31, 1821.—His spine is elongated more than two inches, and the height of the hump is reduced from three inches to one and a half. Both legs have become nearly equal in length, and the hollow on the left side is almost obliterated. The chest is greatly improved in its external form and appearance; his heart beats much less, and has sunk nearly into its proper place. The health is very good, and his countenance has become juvenile.

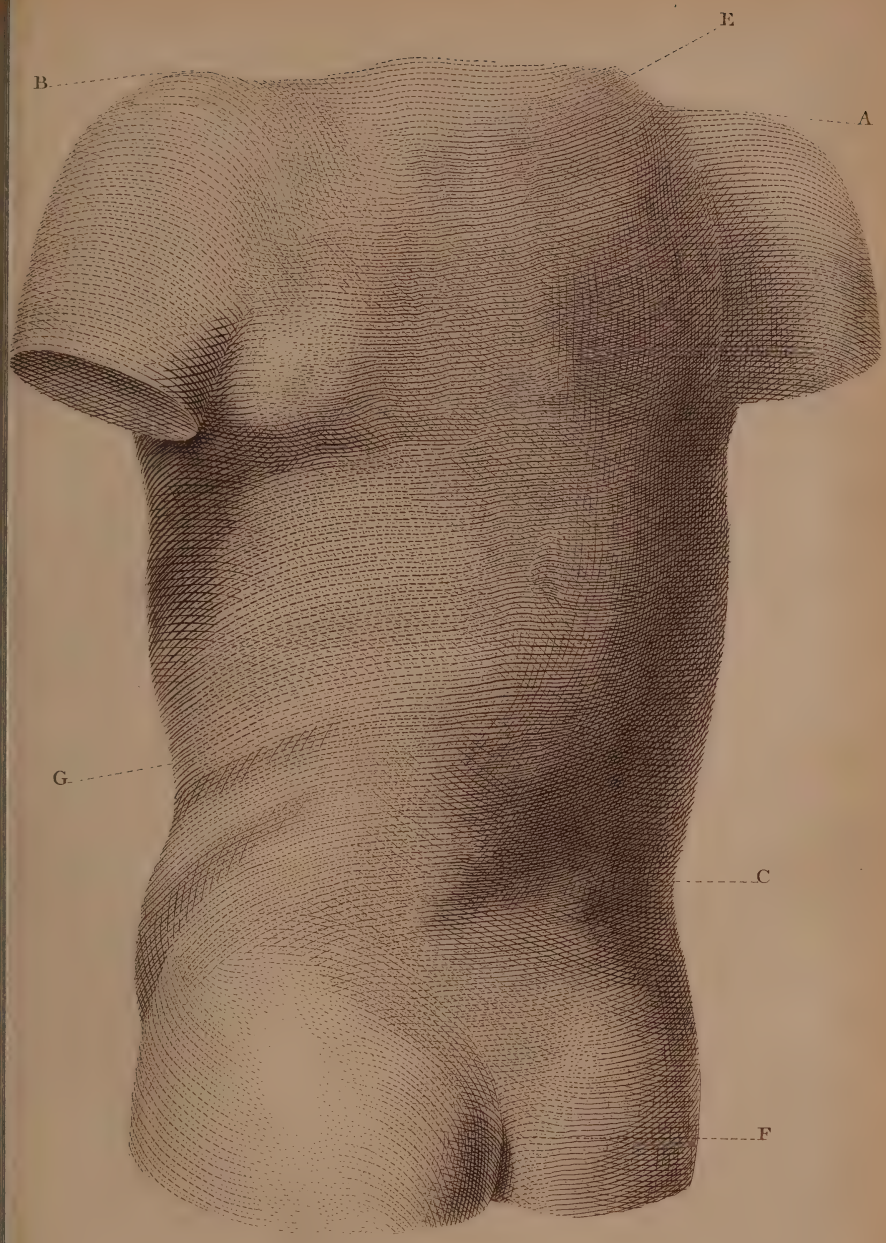
* A. Top of the right humerus. B. Ditto left ditto. C. Crista ilei. D. Crease in the skin. E. First dorsal vertebra. F. Division of the nates. G. Impression of the stone. H. Top of the gibbosity. I. Bottom of ditto.—Jan. 31, 1821.



G. Andrews.

B.R. Green delt

S. Bellin sculpt



G. Andrews.

J.R. Green delt.

S. Bellin sculpt.

April 10, 1821.—Length of the hump, at first seven inches and a half, is now reduced to four and a half; breadth, at first, six inches and three quarters, is now four inches.

August 10, 1823.—A gradual detumescence has been observable ever since the last report. What remains, is only perceptible on viewing the naked back; it cannot be discovered through a tight waistcoat. The heart has entirely recovered its proper place, and his lower limbs are exactly of the same length. He has grown full ten inches since he first lay down, is much plumper, and in excellent health. The circumference of his waist is at this time only twenty inches, though it was full twenty-eight immediately before the treatment began.

November 29, 1823.—The patient has, from an early period of the process, enjoyed uniform good health; he walks quite erect, is very grateful for the recovery of his figure, (see plate VI.*) and the opportunity now afforded him, of filling a useful station in society.

Case IX.

A Case of Hemiplegia with Paraplegia, *cured by Drs. Harrison and Serny.*

Miss Boddam, aged 15, of 59, Sloane Street, Chelsea, but late of Bath, whence she was brought to London to have the first advice, considers her complaint of near sixteen months standing. She at first caught cold, which was followed by a stiff neck; and, looking very awkward with it, one of the teachers of the school said to her, "my dear, I will make you well very soon;" and, at the same time, twisted her neck forcibly, which caused her to

* A. Top of the right shoulder.
B. Ditto left ditto.
C. Crista ilei.
D. Site of the former crease in the skin.
E. First dorsal vertebra.
F. Division of the nates.
G. Impression of the stone.

Nov. 29, 1823.

faint, and hemiplegia of the right side, and paraplegia also, immediately followed.

When I saw this young lady first, her hair had not been combed, nor had she been able to be dressed for several months, and looked most distressing.

The first advice, both in Bath and in London, having failed to afford any hope of recovery, Mrs. Boddam was obliged, against the advice of all her friends, to place her daughter under Dr. Harrison and myself. Dr. H. being very ill at the time, I was sent by him ; and, after an examination of the case, I assured the young lady of a certain recovery.

In this examination I had the opportunity of only feeling the neck ; as the family would not allow me to turn her, fearing sudden death might take place; a most eminent surgeon having declared, that, to turn her on her face would be instant death.

About the 16th of the same month, I was permitted to place her upon her face, on which occasion she fainted, and her friends cried aloud, " she is dead ;" she soon recovered from her fainting fit. I then examined the neck, and found a large swelling about the atlas, and the dentata also, and a small lateral curvature of the spine, below the right shoulder blade.

The symptoms were, as they always are, indicative of the spot where the compression existed ; in the head, producing hemiplegia ; in the spine, paraplegia.

I continued to attend twice a-week, every time making the semblance of the reduction of the subluxation of the atlas, by gentle extension only. Dr. Harrison being still confined, I was unwilling to attempt it myself. Dr. Harrison pressed me to make the real attempt; and, after a month's consideration (a delay caused by bearing in mind the opinion of the surgeon,) I made a strong extension of the neck, with a semi-rotation, and fully succeeded, not without great attendant anxiety, as Miss B. remained for some time in a state of insensibility. Three days after, the young lady sent her compliments, with the assurance that she had fully recovered the *use of all her limbs*, and felt quite well. From this time she so improved, as to become quite another person, gaining health every day.

Some time after this, Mrs. B. went to reside at Boulogne, from which place she wrote the following letter to Dr Harrison:—

No. 51, Grande Rue, Boulogne.

My dear Sir.—Mrs. Hungerford is on the eve of her departure for England, and I will not permit the opportunity to pass without sending you a few lines, as you desired me to mention how my daughter Marian is going on. I am truly thankful to say, that we all think her neck daily improves, the bone is exactly in the centre ; its size is much reduced, and on comparing it with those of the other children, there is scarcely any difference observable. I have, however, been obliged to leave off the neck-supporter ; but have, therefore, adopted the plan that Dr. Serny followed at Chelsea, and have placed a thick pad under her neck, and, I am sure, you would allow the change is for the better.

I have my daughter daily rubbed with the strengthening lotion you ordered for her, but have not of course permitted her even to attempt to rise, though her general health is much improved, and she is altogether much stronger and better. She desires to unite in kind compliments to you and Dr. Serny, with, my dear Sir,

Your's faithfully,

Ellen H. Boddam.

December 20th 1836.

This young lady is now perfectly well.—*May*, 1840.

Case X.

Case of outward Curvature, attended with some extraordinary Symptoms, *cured by Dr. Harrison.*

Miss E. F., of the sanguine temperament, complains of great pains in her loins whenever she is raised from the horizontal

position. The experiment is no sooner attempted, than she is violently convulsed in her arms and legs, upwards and downwards. These agitations suffer no abatement so long as her back is elevated, in however small a degree, from the couch. Her eyes, the rest of her features, and indeed the whole countenance, are frightfully disturbed on these occasions. Not a single muscle of the body seems to be at rest, so extensive and varied is the commotion. She finds neither relief nor mitigation of her sufferings, however long the conflict is protracted. The moment the elevation is discontinued, and her back again feels the crib, the spasms cease, and the countenance resumes its former tranquillity: she becomes composed, cheerful, and easy. The transition is so instantaneous and striking that it appears more like magic, than the effect of any natural cause.

Appetite greater than when in good health: digestion is always accompanied with a redness and flushing heat in the face: whether awake or asleep, she feels indescribable anxiety and uncomfortableness, so as to make her at times indifferent to life. The lower limbs are always clay cold, nearly insensible, and subject to frequent twitchings; but capable of very little voluntary motion. She is much troubled with indigestion, and with a cough, which is supposed to threaten consumption, and also with a sense of stricture over the stomach. Pulse, bowels, and menses, are pretty regular.

Miss E. F., it appears, commenced *the horizontal position six years and a half since.* For three years previously she had been in delicate health, arising, it was supposed, from a diseased liver, and took large doses of mercury for its cure. Walking, riding, dancing, or sitting long at table, produced great fatigue, which was always most felt in the higher part of the loins. The day after dancing, or using other strong exercise, she was always obliged to remain constantly in bed. Travelling in a carriage was productive of very great inconvenience, not wholly subsiding for several days. Besides tenderness, there was the sensation of stabbing, sometimes in one part of the spine, sometimes in another. The pains in the lower limbs were often more severe than those in the spine.

After continuing the horizontal posture six weeks, she found herself worse than at the first. She was, nevertheless, advised to continue it for twelve months. At the end of that time she tried to get up, but found herself in a much more helpless and distressed condition than on first lying down. She could with difficulty bear to be erect even for a few minutes at a time, though supported on both sides. Her sufferings, being referred to general debility and disuse of her limbs, she persisted in taking exercise, till the repetition of it became intolerable, even when continued for a few seconds. After an unavailing struggle of several weeks, she returned to the horizontal position, in which she has been obliged constantly to remain. Every effort to leave the couch invariably produced not only agitation, and a most distressing contraction of countenance, but also an aggravation of her malady for many successive weeks together, with a troublesome headache, sometimes accompanied with nearly a temporary deprivation of her eyesight and hearing.

The first four years she occasionally had leeches and blisters applied to the back, by direction of her physician. Afterwards the late Mr Baynton advised a simple recumbency, and his advice was strictly followed more than six months. At the conclusion of this treatment, the patient made another ineffectual essay to leave the crib. She then consulted a different surgeon, who subjected her to the constant torment of caustic issues, and stimulating dressings, during the period of nearly two whole years.—June 9th, 1821.

Finding no relief from any of the modes recommended, she was at length induced to consult me.

On examining her back, the whole spinal column, except two vertebræ, appeared too elevated.

All the dorsal bones now project singly, and stand too prominent. The first lumbar had, on some former occasion, sunk down full half an inch below the level of the continuous vertebræ, and was nearly buried under the last dorsal. The second lumbar projected considerably, and was partially driven towards the left. There was a corresponding vacancy on the right side of the spine.

The next vertebra below was also rather depressed; the remainder manifested nothing extraordinary.

By my advice, Miss E. F. has had her spine stretched and pressed in the usual manner, every other day since the last report. She has also worn a firm belt, and, for the greater part of the time, next to her back, a wooden shield, properly constructed and well stuffed. Her loins rest upon a firm pad put under the shield. All the dorsal and lumbar bones have already sunk considerably. The natural hollowness of the loins is nearly restored. The two depressed bones have visibly risen. The intermediate one is sensibly sunk, and nearly in a line with the rest of the vertebral column. The distressing uneasiness left her soon after the commencement of the new process. She is become constantly cheerful, and sleeps well. Appetite natural, and digestion no longer produces any increased heat. The limbs are warmer, more sensible, and admit of being freely moved.

On the day of my first visit, which was at the end of last May, she, on being raised a little from her crib, became tremulous in every limb, and, immediately afterwards, violently convulsed in them, and in every feature of her countenance; so that after enduring these painful commotions a few seconds, she was, at my desire, replaced on the couch. During my third attendance, she was more elevated than on the former occasion, and remained longer in that position without experiencing any uneasiness, except slight pain in the first lumbar vertebra. Last Sunday she was put into the sitting posture, with her legs hanging from the couch. After remaining in this situation about five minutes, without suffering the slightest pain, convulsive agitation, or inconvenience in the back, she was again laid down.—July 19th, 1821.

November 6th, 1821.—All the projecting vertebræ are sensibly fallen, and have apparently regained their natural situations. The first and third lumbar are visibly risen. The spinal column has in consequence a more natural appearance, and the chest in front looks much better. She was this afternoon assisted from her couch, and permitted to walk about in the room for five minutes, a pleasure which she had not enjoyed for *nearly seven years*. She

was replaced on the couch, without having sustained the smallest inconvenience.

Though the stretching and the pressure were omitted after the last report, recumbency was strictly observed until May 1822, and is still submitted to, more or less, every day. The friction has also been persisted in.

Miss E. F. did not discontinue her daily walks before the end of December, and was generally on foot several hours together, without suffering any fatigue. After remaining some time erect, or, on bending the head forward, she was always seized with violent pains, which appeared to begin in the neck, and to shoot upwards to the top of the head. Lying down soon removes them. Upon viewing the back again, at this time, I found the spinal column, between the upper part of the shoulders, too much elevated, and standing considerably above the scapulæ. This defect in the vertebral arrangement was unfortunately overlooked by myself and her other medical attendants, *twenty-nine* in number. The headaches, with which she had been tormented, were, by all of us, imputed to other causes. *No proper means were therefore employed to re-instate the vertebræ.* It was owing to displacement, as I conceive, that the nerves, arising out of these parts, became disturbed in their passage through the notches of the vertebræ. Whenever they are interrupted in this manner, the bad consequences do not show themselves at the spinal end, but in their ramifying terminations.

Miss E. F. having determined, in order to relieve herself from this distressing uneasiness, to apply the same treatment to the upper part of the back, which had proved successful in restoring the lumbar vertebræ, it was accordingly this day commenced, August 18, 1823.

October 16, 1823.—The process has been repeated every second day from the date of the last report. The health is not at all affected by it. The spine being restored to its natural figure, the treatment is to be discontinued from this day.

Stimulant frictions were regularly applied to the spinal region, and undeviating recumbency carefully observed to the 1st of

February, 1824. On this day, the patient again left her crib, and began to resume her walks. At their commencement, the exercise was, as formerly, limited to a few minutes daily. No headache or other inconvenience followed, though it was gradually extended to more than half an hour at a time. She had the misfortune, towards the end of the same month, while walking alone in a room, *to fall down* suddenly in a fainting fit. By this accident three of the lower cervical, and as many of the upper dorsal vertebræ, were again displaced, partly outward and partly in a lateral direction. To relieve herself from the effects of this new calamity, she resolved to adopt the course, which had already succeeded so well in restoring her bodily health. The method, formerly described, was accordingly resumed September 18th, and persevered in till December 20th, 1824. At this period, all the prominent vertebræ being replaced, the treatment was discontinued. Recumbency, with stimulant frictions and mechanical pressure, were strictly observed till April 1825.

The patient left her couch May 16, 1825, and walked in her room with great ease for a few minutes. The exercise has been daily repeated, gradually enlarging the periods. She is now on foot two hours at a time, either walking or standing. She has suffered no return of headache, nor has her countenance been at all agitated, since she discontinued the horizontal posture, in the manner described.—July 16, 1825.

Since last report, Miss E. F. has continued her daily walks, and extended them to three or four miles in every direction. She has also been upon an excursion into the country. Her health and appearance have greatly improved, nor does she experience any inconvenience from the erect posture, or from being on her feet several hours together.—March, 1827.

Case XI.

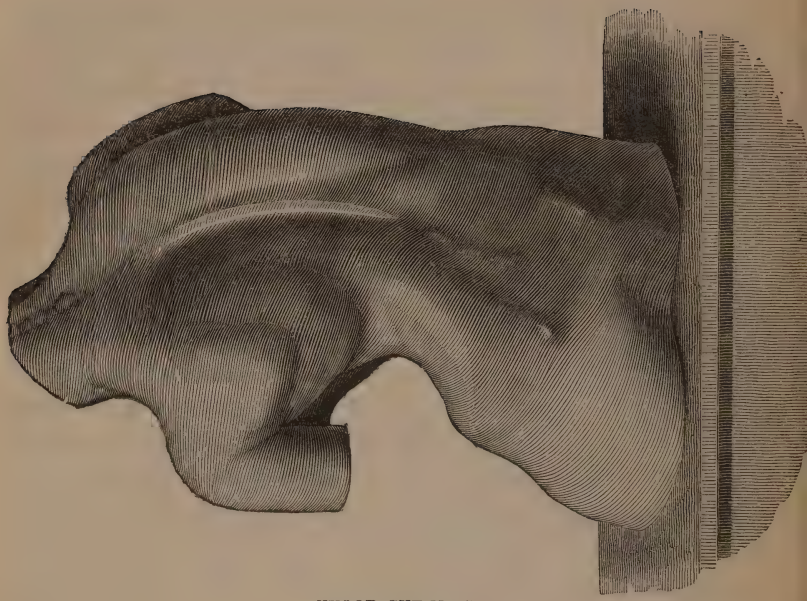
A Case of semi-lunar Curvature of the Spine, which bent the left side nearly double, *by Dr. Serny.*

Ann Stuber came under treatment on the 28th of August, 1838, aged about 15, by an order from Her Royal Highness the Duchess of Kent.

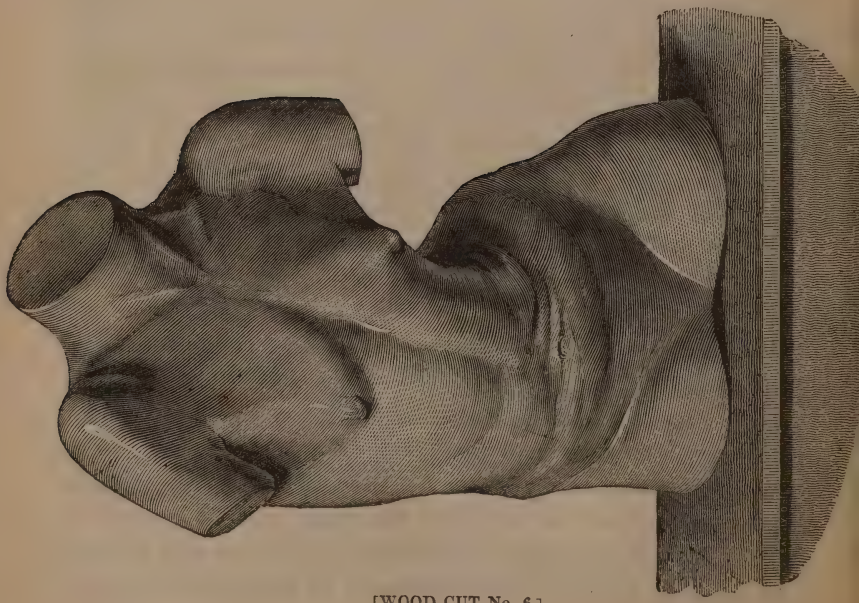
She stated that she had been afflicted for several years by a curvature of the spine; had suffered from hemiplegia of the right side; but was now better of the latter complaint, and was also relieved from the severe pain in the left side of her head. She complained of great sufferings from the curvature, for which she had lately been in St. Bartholomew's Hospital for one month, but nothing was done, not being a proper case for that institution.

I took the case under my sole direction from the commencement of the treatment, when a cast was taken, the front and back views of which are presented in the wood cuts Nos. 5 and 6. A second cast was taken, in August, 1839, one year after commencing the treatment, to prove the great benefit she had received; and, more particularly, because I had been informed that this young person was to be removed to Kensington Palace, on the 6th of September, 1839. She was removed at the time stated, and I requested permission to complete the cure, any where, and at my own expense, because I knew the treatment never failed, when properly conducted.

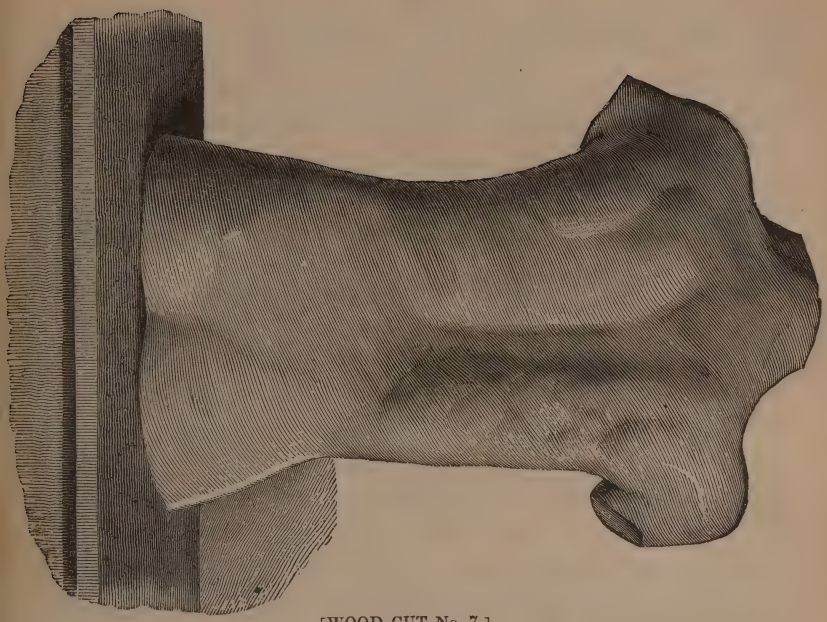
When Ann Stuber was under treatment, just before her removal to Kensington Palace, her figure gave general satisfaction, as may be inferred from the change exhibited by the wood cuts 7 and 8 respectively, the back and the front views of the second cast. I may be permitted to say I have felt severely the disappointment, at not being allowed to complete the cure, both on account of the future happiness of this young person, and on my own account, to be deprived of the certain opportunity of giving satisfaction to



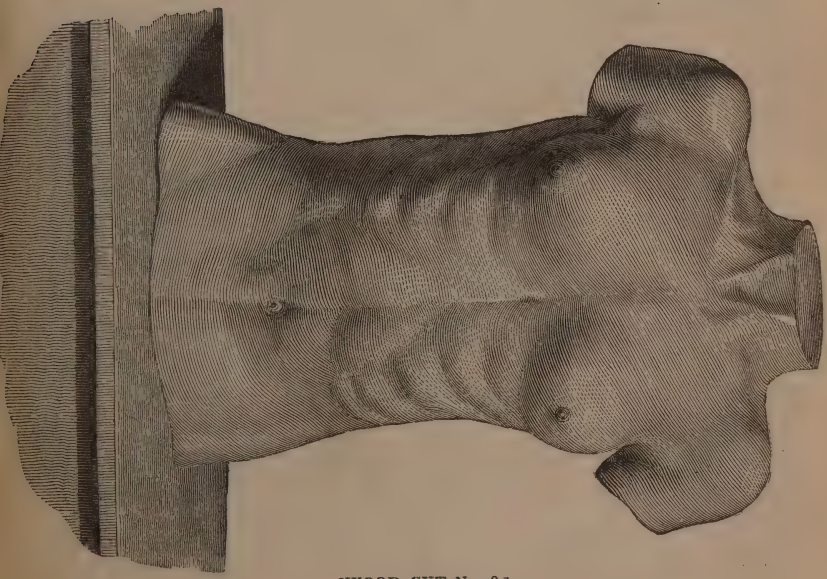
[WOOD CUT No. 5.]



[WOOD CUT No. 6.]



[WOOD CUT No. 7.]



[WOOD CUT No. 8.]

Her Royal Highness the Duchess of Kent, by the cure of Ann Stuber.

The progress made affords a satisfactory evidence, that, had the treatment been continued, she would have entirely recovered; but I must, in duty to myself, express my fear, that, as Ann Stuber did not continue to adhere to the necessary precautions, not only her recovery may be prevented, but her relapse will be rendered certain.

Case XII.

Case of lateral and outward Curvature, *cured by Dr. Harrison.*

Mrs. A. B., aged 26, of a sanguine temperament, complains of great and long continued weakness and uneasiness in her back. Upon examination, the *third, fourth, fifth, and sixth* dorsal vertebræ were much displaced, and *projecting backwards* in the *form of an arch.* On *slightly* touching the skin on the right side, near to the projection, she suffers a painful sensation, which always goes off when *greater pressure* is used. Upon coughing or sneezing she constantly experiences a distressing tightness across the chest. Going up and down stairs always, and walking generally, produce great difficulty in breathing. She is liable to faint from slight exertion. Occasionally some *pricking and numbness* are felt in the right foot for a few minutes. Little pain or tenderness is excited by pressing the spines or bodies of the vertebræ, nor does there appear to have ever been any inflammation in them. She first discovered a small projection in the back, about six years since. Being unaccompanied with pain or tenderness, she continued to disregard it, under a supposition that nothing could be done for her relief; though she knew that the enlargement kept increasing, and that her height was visibly diminishing. From this time exercise soon produced fatigue, and the trunk suffered most from

it. She spent six weeks, in the spring of 1817, in a constant round of fashionable amusements; in which time the weakness of the back was so much increased, that a physician and surgeon of the greatest eminence in London were consulted. Four dorsal vertebræ were discovered to be much displaced, and the medical gentlemen said they could only be cured by *anchylosis*. For this purpose caustic issues were inserted, and afterwards discontinued at the patient's own desire. A recumbent posture, according to Mr. Baynton's plan, was then adopted, and the diseased arch covered with emplast. galban. comp. tonic and aperient medicines were also directed. This latter mode of treatment, though never strictly followed, has been persevered in for the last fourteen months without any benefit.—October 14th, 1818.

Several weeks unavoidably interposed between my first consultation and commencement of proceedings, on November 26th, 1818.

December 5th, 1818.—The two uppermost of the affected vertebræ have already sunk down so as to leave a great hollowness between them and the two lower ones. The distressing *pain in the skin*, formerly mentioned, is *nearly gone;* nor has the patient lately suffered much uneasiness from the right foot.

March 21st, 1819.—The lowest vertebræ in the curve recovered its natural situation six weeks since, and the other three are much fallen. The pain on the right side of the incurvation is quite gone. She no longer experiences any inconvenience from coughing or sneezing. The difficulty in breathing, and the disposition to faint, have entirely left her, as well as the tightness over the chest and stomach.

May 12rd, 1819.—The two upper bones of the arch have obtained their proper places, and been stationary for the last two or three weeks.

July 23rd, 1819.—All the bones are restored to their natural places, leaving little prominence or other affection of the spine.

September 20th, 1819.—She has been permitted lately to rise from her mattrass, and walk about the room for a quarter of an hour before and after dinner. She moves with ease, and finds no inconvenience from it. The health is extremely good.

October 20th, 1819.—On returning home after an absence of four months, her friends were particularly struck with her improved appearance, and declared her to be considerably *taller than at any former period.*

This opinion leads to a belief that the disorder began earlier than the time above stated.

September 30th, 1820.—The lady continues in very good health in every respect. The spine remains quite sound and well. Walking and carriage exercise afford her great pleasure, and are pursued without fatigue.

April, 1824.—Mrs. A. B. continues in good health, and has, for several years, participated in the amusements of her age and station.

June 12th, 1825.—Mrs. A. B. has regularly visited London every spring, and entered into its various amusements. She remained in excellent health till last Midsummer. About that time it was her misfortune to be seized with an inflammatory complaint, which brought her life into great danger, and left her in a state of extreme debility. She was carried, on her recovery, to the sea coast late in August, and has continued there through the winter. She left her maritime residence this month, having recovered her former strength and rosy complexion.

March 22nd, 1827.—The health of this lady is again entirely restored. Before dismissing the case, it is of importance to remark, that, since the spinal treatment was relinquished, in May 1819, the patient has been afflicted with two very severe and tedious fits of indisposition, attended with much fever. One, as already stated, occurred in June 1824, and the other in the autumn of 1825. Her constitution being extremely weakened in both attacks, convalescence was proportionably slow. It required in the former, a long abode near the sea; in the latter, a regulated temperature for many successive months. During these illnesses, and perhaps even before their invasion, the ligaments, from *inattention to the prescribed rules, had partially given way, and suffered some of the vertebræ slightly to protrude again.*

This lady afterwards perfectly recovered.

Case XIII.

Case of semi-lunar Curve, *cured by Dr. Serny.*

Miss Moseley, aged 22, A. D. 1837, had suffered from a spinal affection from her ninth year.

This affection, originally caused by practising on the harp, gradually increased, until it presented the following appearances at the time already noted.

The spine was curved *towards the left*, producing a considerable *elevation of the ribs* immediately under the shoulder blade, and carrying upwards the left shoulder. On the right side a *considerable hollow* presented itself, the right shoulder being much lower than the left, the pelvis approaching on that side near to the shoulder.

The effects produced on the health were marked; digestion was impeded; the secretions were altered and otherwise affected; and the general health was bad.

She remained under treatment for some time, namely, from July 1837, to September 1838, and recovered her form and her health, and has been enabled to undertake the arduous duties of a governess, in which she is now (May 1840) engaged.

Case XIV.

Case of lateral Curvature, attended with the loss of use of the limbs, and other symptoms, *cured by Drs. Harrison and Serny.*

Miss C. aged 16, of Albany Street, Regent's Park, had been afflicted, for several years, with a lateral curvature of the spine. The right shoulder was greatly elevated, causing great difficulty of breathing. The functions of the digestive organs were im-

paired, being accompanied with paraplegic affections of the lower extremities, with inability to walk or to move her limbs with ease, fatigue at the least exertion, and, when attempting to walk, a disposition to walk upon both outer ankles. The highest professional assistance was obtained without benefit. It was decided that nothing further could be done, when, from circumstances, Miss C. came under the mode of treatment established by Dr. Harrison.

In about eleven months the cure was completed, the health having progressively improved during that time; and Miss C. is now beautifully perfect in shape and figure, both feet having been restored to their natural symmetry.

Case XV.

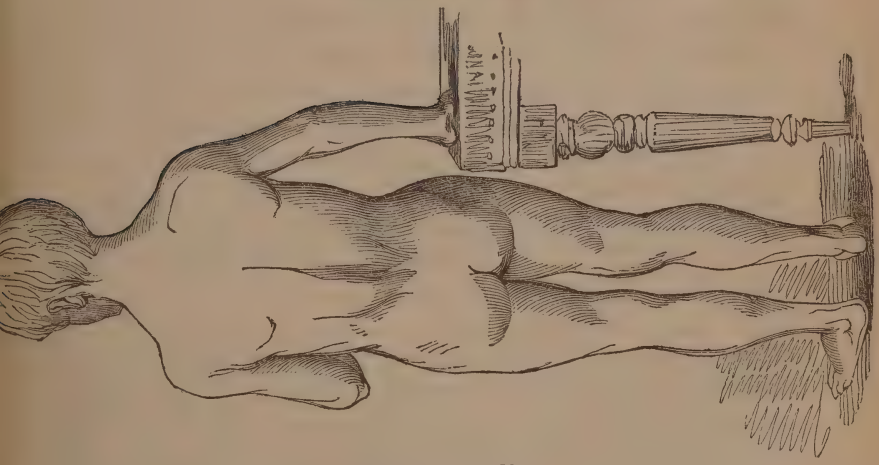
A Case of outward Curvature of the lower parts of the Spinal Column, attended with ricketty Thighs and Legs, bowed Knees, and the plantar surface of the Foot turned upwards, *cured by Dr. Serny.*

October the 20th, 1836.—Thomas Chilcott, aged 3 years, has lost the use of the lower part of his body. He suffers from weakness in his thighs, legs, and feet, and is unable to walk, and crawls upon both outer ankles; the legs and thighs bow out considerably, the abdomen projects forward, the four last dorsal and the whole of the lumbar vertebræ stand outward, making an elevation so as to compress the spinal column. [See wood cut No. 9.]

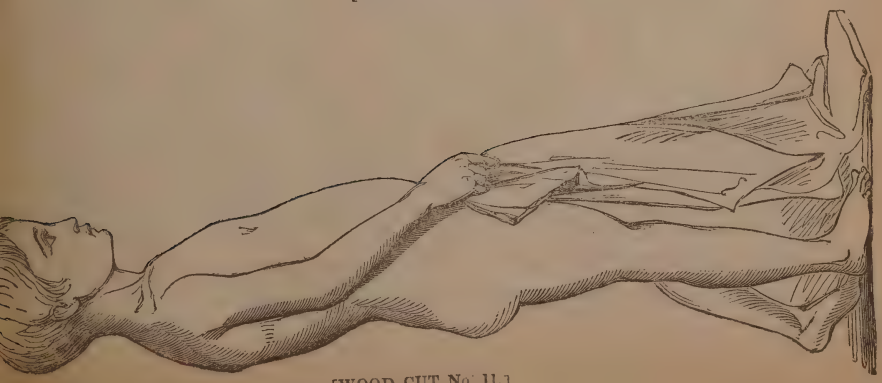
Thomas Chilcott remained about two years under treatment, which consisted of constant pressure and of gentle friction, and extension daily for half an hour only, the usual time in most cases, and the application of a back shield duly prepared. Thomas Chilcott is now perfectly well, and can be seen at any



[WOOD CUT No. 9.]



[WOOD CUT No. 10]



[WOOD CUT No. 11.]

time by proper application. The wood cuts No. 10 and No. 11, which have, this day, June 11, 1840, been drawn by an artist, (Master Chilcott having stood for them,) present the best evidence of the cure, and, at the same time, of the efficacy of the mode of treatment; wood cut No. 10, presenting a back view, and wood cut No. 11, presenting a side view, of this interesting boy.

The state of this child's limbs would be declared, and properly so, *ricketty*, and yet the result testifies, that, by *curing the spine*, the ricketty indications altogether disappeared. Does this fact, and this is not a solitary one, demonstrate that rickets result from diseased spine? This is left for the consideration of the reader. If the answer be in the affirmative, what encouraging prospects are opened to the friends of human happiness.*

Case XVI.

Case of outward Curvature, attended with affection of the Heart, and affection of the Sight, *cured by Dr. Harrison.*

Mr. C. D. aged 24, of a delicate habit, has been a long time indisposed. He is subject to *severe palpitations of the heart*, from apparently slight causes, great tightness over the stomach, and want of appetite. He swallows with inconvenience, and reading aloud soon tires him. The eyesight has gradually got worse for several years past. He used to amuse himself with gardening, but has been obliged to desist, because, on stooping, his face became uncomfortably swollen and red for a long time afterwards. He also felt a dull heavy pain in the upper and inner part of his head. He suffers great uneasiness in the right side, whenever even slight pressure is made on the edge of the ribs, or immediately below

* Into this subject it is proposed to enter in the second volume.

them. All the false ribs on that side are flat and protuberant; the liver has, in consequence, been forced upwards, and driven out of its proper situation. He has taken an aversion to common diet, and relishes only fat meats, butter, or food prepared with warm condiments. The left arm is very weak, and often nearly insensible. The lower limbs are numb and cold; they are subject also to clammy perspirations and convulsive twitchings. Bowels constipated; urine very turbid, of extraordinary colour, and disagreeable smell; pulse frequent; the whole of the spine lying between the shoulders is considerably arched, and rises so much above them as to be quite unsightly; the small of the back is disagreeably hollow. This prominence is occasioned by the subluxation of three of the cervical, and five of the upper dorsal vertebræ; all of which are tender, stand irregularly, and at unequal distances from each other. He imputes his complaint to the fatigue of riding on horseback, when in weak health; when he fainted repeatedly from the exertion. He has consulted several of the most eminent of the faculty within the last few years; no two of them entertained the same opinion of his case; some declared him to be consumptive, and recommended a mild climate; others referred his disorder to the liver, and others to the stomach.

May 5th, 1820.—The eight vertebræ, formerly described, have been, for some time, restored to their natural situations. The curve is entirely removed, and the part sunk into a groove of nearly an inch in depth below the shoulders. The hollowness in the loins is not more than natural. The spine, in consequence of these alterations, is become straight, and remarkably well shaped. The ribs on the right side have been made to resemble those on the left. The *palpitations have entirely left him,* and the tightness of the stomach is removed; the weakness and the numbness in his arms and legs are no longer experienced. Has not lately had spasms or clammy sweats, and the feet are much warmer. His looks have considerably improved, and the urine is natural. He has taken *an aversion to fat* in every way, preferring lean meats, with a proper mixture of vegetables. The diet is natural, and appetite good.

July 20th, 1820.—He is quite well in health, and feels his back gaining strength daily. The liver, having fallen into its natural situation, the tenderness, formerly mentioned, is nearly gone: it had constantly troubled him for the last ten years.

September 18th, 1820.—The *eye-sight* is entirely restored. Deglutition is easy, and reading aloud no longer fatigues him. He returned home this day in very good health and spirits.

November 29th, 1820.—The tenderness over his liver, and all the other complaints, having entirely left him, he has lately ventured to take walking exercise in the open air. This recreation is performed with ease, produces no fatigue, nor is it attended with any uneasiness of the back.

July 10th, 1821.—The patient continues to enjoy good health. He, unaided, walks about daily in his father's park. This recreation is performed with ease, produces no fatigue, nor is it attended with any inconvenience.

December 17th, 1824.—This gentleman went from under my care into a distant county, where he has subsequently resided. My information concerning him has been neither frequent nor circumstantial. According to the last account, he continues to look well, enjoys the exercise of walking, and occasionally performs service in his parish church.

Case XVII.

Case of outward and lateral Curvature, *cured by Dr. Harrison.*

Mrs. Wells, of Hemel Hempstead, aged 40, was thrown out of an open carriage with great violence, upon her face and elbows, in August 1817; she was much bruised, but felt no particular inconvenience till March 1819. During this time, her shoulders were observed to grow more prominent, and to be accompanied with a marked depression in the upper and the fore part of the

chest. She has been a severe sufferer ever since, and has taken many different medicines without obtaining any relief.

The case was, for a long time, supposed to be *rheumatics*, and treated accordingly.

In the spring of 1820, she consulted a very experienced and highly respectable surgeon, who said she was suffering under a *disease of the spine*, that several of the *vertebræ were decayed*, and added, that there existed not the smallest prospect of permanent relief. He recommended, amongst other things, the insertion of caustic issues near to the part most protuberant. His directions were neglected, owing to the despondency of her medical attendant, who substituted blisters, and never had recourse to issues or setons.

Mrs. W. has little use of the upper, and none of the lower limbs: to herself they always feel heavy, cold, and numb, though, to other persons, they are sometimes cold, at other times hot. She is unable to bend her back in the smallest degree; nor can she, when lying in bed, turn herself to either side. The weakness of her limbs and back came on imperceptibly, and has increased very slowly. It was more than two years after the accident occurred before she was entirely deprived of all power in either the back or the inferior extremities. Appetite has lately declined, and her liver has often been affected; the latter complaint is discovered by looking at the countenance, which is, at these times, dull, sallow, and of a yellowish brown. The urine is frequently turbid, with an ammoniacal smell; motions dark coloured and offensive; menses are of a brown or greenish hue, and emit a disagreeable odour; pulse weak and of moderate frequency. *The dorsal vertebræ and the ribs, by their extraordinary prominence, form an unsightly convexity or gibbous swelling.* The third, fourth, fifth, and sixth, in particular, appear considerably higher than the rest, forming the arch of a small circle, and their spinous eminences bend a little towards the left. Owing to this partial turn, the transverse processes may be distinctly felt on the right side. *The dorsal convexity has produced a disagreeable hollow in the small of her back*, with a corresponding fulness of the abdomen. There is not, and never has been, tenderness in any part of the spine.

The patient being placed upon a couch, as usual, had her back and chest well rubbed with an emollient liniment for more than an hour, while the spine was stretched; the prominent vertebræ and ribs were then pressed in the direction of their natural situations. A firm bandage was afterwards fastened round the chest, to prevent the bones from returning to their previous state.

November 4th, 1823.—The arms and the legs have acquired more feeling, a better colour, and their natural warmth. She can already move her arms freely, and her toes a little. The back is less arched; only two of the four *irregular vertebræ appear above the rest.* The means of cure above recommended have been daily repeated since last report. A steel shield was this day placed over the most prominent vertebræ.—November 16th, 1823.

November 28th, 1823.—The contour of the spine is entirely restored, with the exception of the fourth and fifth dorsal vertebræ, which still project a little: their transverse processes continue partially depressed, and turned towards the left side: those on the right side may be easily felt. She has recovered she *faculty of moving her hips, knees, ankles, and toes,* with some degree of freedom. The left leg has, from the first, been weaker, and continues more infirm, than its fellow.

December 8th, 1823.—Besides bending the lower extremities with greater facility, she can now *draw them upwards* and *push them back* with some degree of force.

December 10th, 1823.—Each day since last report has been marked with increased power in the lower extremities: she moves them with great freedom and ease in every direction. The proper form of the back *is entirely restored,* except where the two vertebræ, above mentioned, have raised the skin into a small circular tumour.

December 31st, 1823.—The patient continues in excellent health, has a good appetite, and sleeps well: moves her limbs with facility in every direction: can not only pull them up and push them down, but crosses and draws them back again, without the smallest difficulty.

January 28th, 1824.—The strength and the activity of the lower extremities have lately increased. She can elevate and depress

her chest and belly with great ease. The projecting vertebræ are lower. Her countenance is much improved.

January 30th, 1824.—The two vertebræ, formerly described, still remain slightly raised. In all other respects the spinal column has recovered its lost figure. The menses and the urine have regained their natural properties. She is in excellent health and spirits; was this morning assisted from her couch, and walked about in the room for ten minutes with great ease, and strength in her lower limbs.

She was permitted to return home this day, on condition that she agreed to maintain the horizontal posture, until the *ligaments of the spine* had entirely recovered their lost tone and vigour.

April 17th, 1824.—Mrs. Wells has enjoyed good health since her return home, and looks better. Her back has gained strength, and is rather flatter. She feels stronger in her limbs, but has remained constantly on her couch.

February 14th, 1827.—In a letter received from Mrs. Wells, in answer to my inquiries into the present state of her health, she complains only of catarrh and slight rheumatic pains.

This interesting case must excite the attention.

Case XVIII.

Case of outward Curvature, attended with many distressing Symptoms, *cured by Dr. Harrison.*

Miss Read, aged thirty-six, has great difficulty in walking even short distances. She often stumbles on level ground, from the weakness of her limbs: constantly stoops, and cannot raise herself upright, or remain without assistance in the erect position. The countenance is of a dull yellow, is contracted, careworn, and exhibits the appearance of great age. Appetite small, digestion imperfect and variable, pulse weak, urine generally turbid, and emits the ammoniacal odour; bowels constipated, the stools are dark coloured, and impart a sulphurous smell: menses return at regular periods, abundant in quantity, resemble tar in appearance,

and are highly offensive: she is often troubled with sharp and transient pains in her right leg. She is uncertain as to the cause and the duration of her disorder, but is of opinion that it commenced more than twelve years since, soon after falling down stairs. Change of air to the sea side and other places has been tried, but affords no relief. Medicines of various kinds, and regulated diet, have been equally unavailing, though persevered in during the whole period of her indisposition. On examination, all the dorsal and lumbar vertebræ were more or less out of their proper situations. [Plate VII.* C. D. E. B.] The former are irregular in their distances from each other, and in their relative height. The two last dorsal, and all the lumbar bones, combine to form a considerable posterior and lateral curvature towards the right.—December 23rd, 1821.

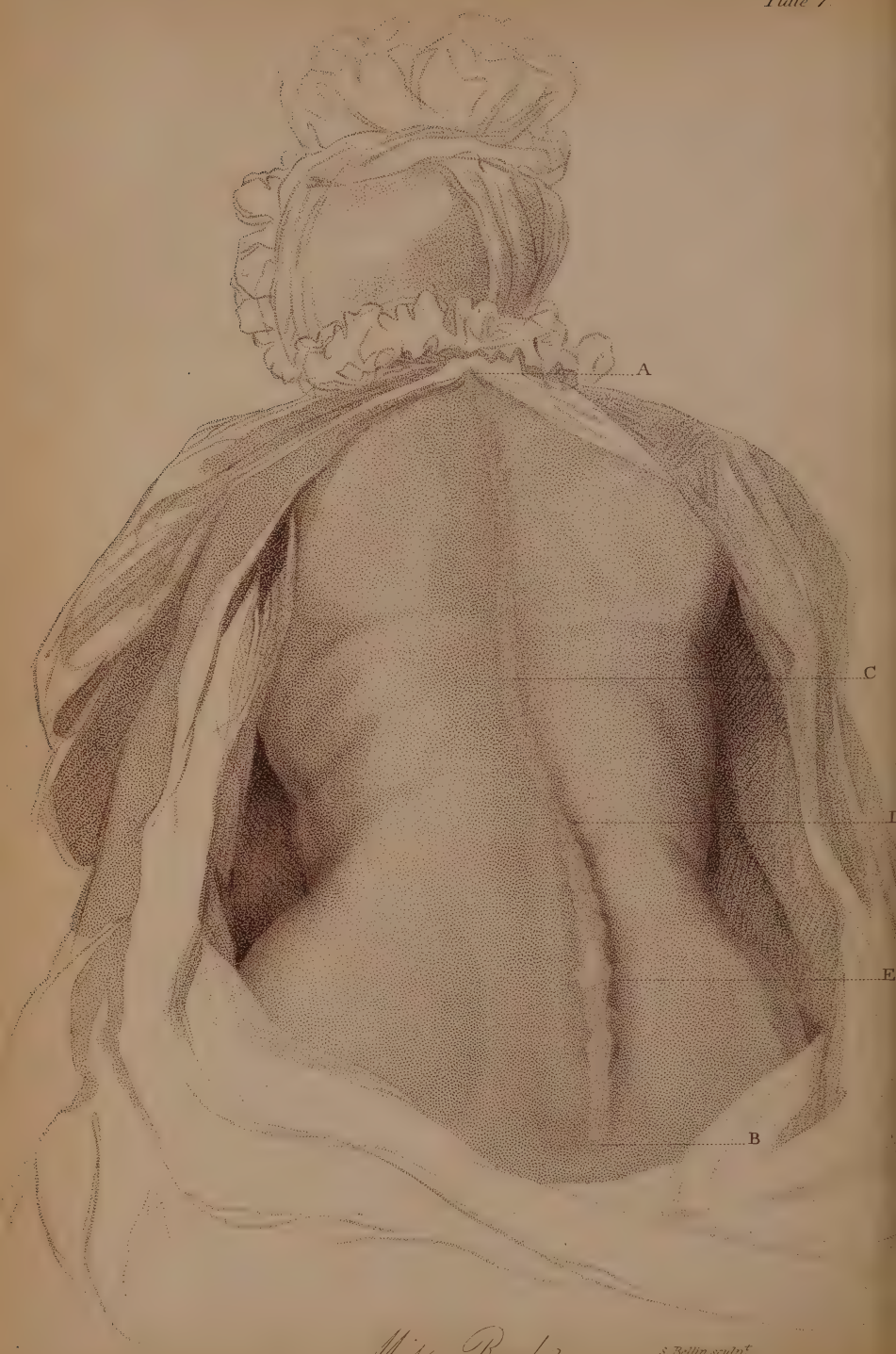
March 25, 1822.—The whole spinal column is visibly increased in length, and much improved in general appearance, the back having, in a great measure, recovered its natural arrangement. It is already a little grooved and depressed, where it was formerly raised into a considerable ridge. The small of the back, having recovered some portion of its natural hollow, exhibits a striking contrast with its late unsightly elevation. Her countenance is become open, fresh coloured, and juvenile; appetite and digestion much improved; her urine, fœces, and menses, are all natural and regular.

August 7th, 1822.—The vertebræ were declared, at this visit, to have regained their natural places, [see plate VIII.] and her health is entirely restored; she is permitted to walk a short time every day, which she does with great ease, and an erect mien; she has no longer any difficulty in standing upright, and is considerably taller, as well as much improved in her personal appearance.

June 6th, 1823.—The patient has hitherto enjoyed an excellent state of health, with the exception of a few slight attacks of catarrh.

February 1827.—She has possessed uninterrupted good health ever since the last report.

* A. B. Spinal column, with depression between the shoulders.—C. A curvature of the spine towards the left.—D. B. A second curvature towards the right.—F. Greatest elevation of the arch.



Miss Read?

S. Bellin sculp.t

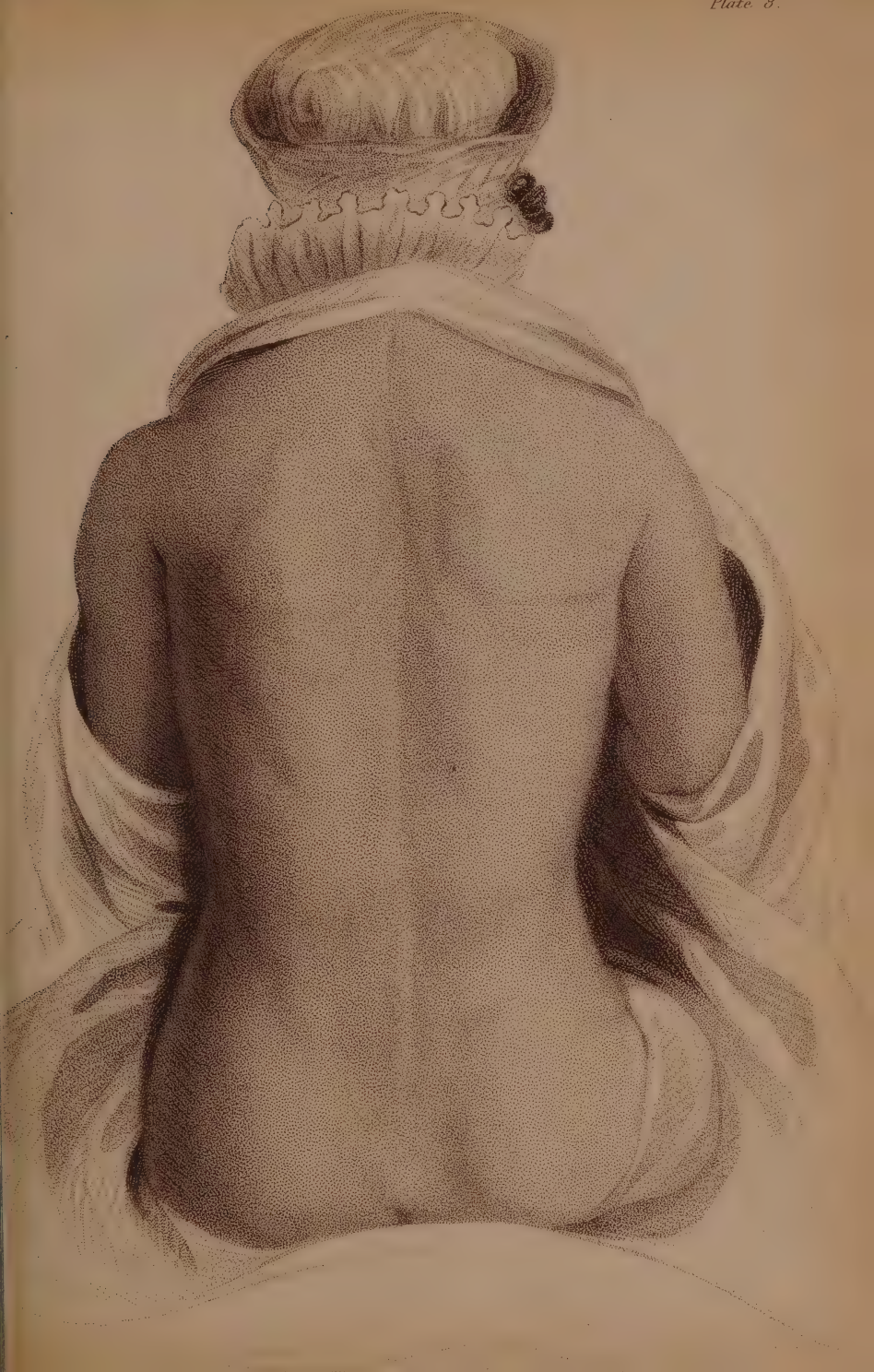


fig.
9.
6.

Case XIX.

Case of outward Curvature, attended with Palpitations, difficulty of Breathing, Tightness, Hysteria, and other anomalous Symptoms, *cured by Dr. Harrison.*

Miss Pryor, aged 28, is unable to stand or sit erect, even for a single moment, unless supported. She walks with great difficulty, requiring the assistance of a stick, and the arm of a friend, in consequence of the great debility, and the little power that she can exert in moving her limbs. The whole spine is tender to the touch, and bends outwards, like a hoop, whenever the weight of the head and trunk is placed upon it, either in walking or sitting erect.

On lying down, which is her only easy position, the spine immediately recovers its natural figure, and she then possesses the free use of her lower extremities.

She is almost constantly tormented with aching, shooting pains, in the *back of her head* on the left side, which leave the scalp tender to the touch. The nervous system is so delicate, that the slightest causes produce palpitation, dyspnæa, sighings, tremors of the limbs, agitations, and, not unfrequently, hysteria, under various forms. The countenance appears dull and sallow; her sight, after a few minutes exercise of her eyes, becomes indistinct, as if a dark object were sailing before it. She has seldom any appetite, and digestion is greatly impaired. The bowels are commonly torpid, and the menses return at uncertain periods.

On careful examination, no irregularity, inflammation, fulness, or other derangement of the vertebral pillar was discoverable. A tenderness, apparently confined to the spinal ligaments, very severe, and extending to every part of the column, was the prominent feature.

The complaint is of *fourteen years* continuance; it followed a protracted typhus fever, which seized her at the age of fifteen,

and so reduced her, that, upwards of three months after its disappearance, she had not strength enough to raise herself into the erect position; from that time to the present, she has always stooped in walking, and soon became tired.

Her health was never entirely restored. About six years after the first indisposition, she was confined to her bed more than three weeks with a *bilious* fever. She suffered so much from the severity of her complaint, that it was many weeks before she had sufficient strength to rise alone from her chair, or move, without the aid of some other person, from one place to another: her knees and legs have always been, and still are, the weakest members.

August 16th, 1822.—She was well rubbed with an anodyne liniment this afternoon, for more than an hour; a broad bandage being afterwards fastened round her back, she was placed flat upon the usual couch, and desired to confine herself entirely to that position.

September 28th, 1822.—A stimulant liniment was substituted for the former embrocation, and a wooden shield, fixed under her bandage, was placed along the whole length of her spinal column.

November 20th, 1822.—The bowels having been carefully regulated, the headache and dyspepsia are considerably relieved. She feels her back stronger, and can bend it with great ease as she lies on the couch.

February 16, 1823.—She has remained free from pain in her back, and thinks she is strong enough to get up and walk alone.

April 20th, 1823.—Her countenance is become animated and clear. She was, this day, indulged in walking about her room five minutes, supported between two assistants. She felt no pain in her back from the erect position, or other inconvenience from the trial. The exercise is to be repeated every second day, gradually lengthening the periods.

May 25th, 1823.—She has lately extended her walks to a quarter of an hour, and repeated them daily. She is recommended to visit the sea coast, and pass the summer there.

November 10th, 1823.—Miss Pryor returned home from Margate, in excellent health and spirits. She, unaided, can walk

a couple of miles with ease. The digestive organs are in good condition, and all the bodily functions properly performed. Her headache is gone, and she has greatly improved in general appearance.

April 22nd, 1824.—Miss P. has passed a pleasant winter; excepting a few attacks of catarrh, her health has been uninterruptedly good. She is prudent in her employment of exercise, and still devotes three or four hours every day to the horizontal posture. She proposes to reside, during the approaching summer, near the sea, and to bathe regularly, confidently anticipating the full recovery of her health and strength.

December 5th, 1824.—She remained two months at Margate. The cold bathing was very agreeable, and did her great service. Her strength is so much restored, that she feels neither pains nor weakness in the back. Her friends agree that she carries herself more upright and erect than at any former period. The countenance is also clearer and more animated. She no longer thinks herself an invalid, though she still continues to recline several hours every day.

March 22nd, 1827.—Miss Pryor has, for a long time, been in the enjoyment of good health, and her figure preserves its fine shape. She returned for a few weeks last summer to Margate, where she regularly bathed, and sailed upon the open sea. She also took several long rides on horseback. From that period to the present time she has been in the habit of often walking for hours together, without experiencing fatigue or other inconvenience from the exercise.

Case XX.

A Case of outward Curvature of the Spine, combined with lateral Curvature, of Two Years standing, *produced by playing at the game of leap-frog, cured by Drs. Harrison and Serny.*

Master Lennard S. of Chelsea, aged between 10 and 11, came under the spinal treatment in August 1833, for a paraplegic affection of the lower extremities, the symptoms commencing from the point where the compression on the spinal cord took place, that is, at the fourth and fifth dorsal vertebræ, and thence downwards; but the most acute compression of the spinal column was at the sixth, seventh, and eighth dorsal vertebræ, *so that all the internal organs, below* the same, were in a state of torpor, or almost total inaction. In addition to these effects, morbid secretion had taken place, so as to cause several vertebræ to anchylose, that is, uniting together by inflammation and suppuration, forming one inflexible outward projection, as the wood cut No. 12 shows. The distance from the projection to the arm-pit in the cast, from which the wood cut is taken, is remarkable, and the arm itself, at the shoulder point, is projected beyond the chest.

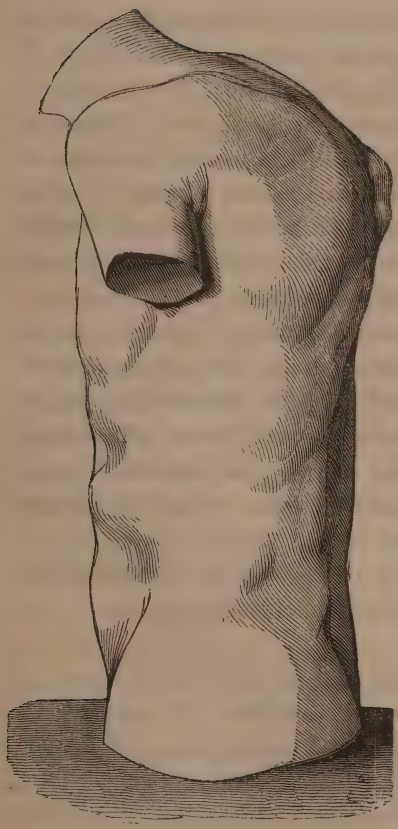
One symptom, usually connected with this deformity, was, that the bowels were very difficult to regulate, the medicines being frequently changed to produce the desired effect.

The treatment was the same as with the case of Mrs. Halliday, Brummage, Sutton, and Miss Robert.

I am happy to say he is now (June 1840,) in the enjoyment of perfect health and figure, and he has, in his deportment, a most interesting, lively, and agreeable appearance. The wood cut No. 13, demonstrates this improvement; while in the cast, whence the wood cut No. 12 was taken, the arm projected beyond the surface of the chest, it, in this, is in its proper place, and is behind

the surface of the chest; and while the projection from the back to the arm-pit, so considerable at the beginning of treatment, there is none but the natural projection.

[WOOD CUT No. 12.]



[WOOD CUT No. 13.]



Case XXI.

Case of double Curvature, attended by loss of power in the Arms and the Legs, *cured by Dr. Harrison.*

The Rev. Mr. —— was paralyzed in the arms and legs, having had his back injured by falling from a vicious horse. Both his feeling and general health were much impaired. The breath was nauseous and disagreeable on approaching his person. This young gentleman had been under the care of the leading metropolitan surgeon in spinal complaints more than twelve months. During this long trial, various professional consultations were held upon the case; but the persons chosen were known to follow a similar mode of practice, and to advocate the same doctrines.

One of the consulting surgeons—speaking, I believe, in accordance with the rest—told the aunt plainly, that it was *impossible to cure* her nephew; and that she must be prepared to see him crippled, and wheeled about in a merlin chair for the remainder of his life. Under all former modes of cure, the deplorable consequences predicted would doubtless have been such as this eminent and experienced hospital surgeon foretold.

The following letter, written by one of the medical attendants, shows the unfavourable opinion entertained of the case:—

Sir,

I have just had a letter from our patient, the Rev. Mr. ——, in which he describes to me his present condition. It is a very distressing case, and one over which I fear our art can exercise little or no influence. Every thing seems to confirm the opinion I was at first led to entertain, *that there is organic disease in the cervical portion of the spinal chord, or in the lower portion of the brain, or in both these situations. The moxa has evidently done him no good, and I should wish the ulcerated sore to be dried up immediately,* and nothing more to be done for the present; but, in the mean time,

that such medicines should be exhibited as you may judge most beneficial in preserving his general health.

I am, Sir, &c.

On examining the back of my patient, at the first visit, I discovered two considerable derangements in the spinal column, which had been entirely overlooked—one between his shoulders, the other in the loins. By subduing them, the paralysis of the arms and the legs was removed. Appetite, at first trifling and inconstant, has become strong and regular. He is restored to the enjoyment of excellent health, the free use of his limbs, and will, with care, soon recover the full possession of his bodily vigour. The digestive functions were, at first, impaired, because the nerves which supply the stomach and collateral organs had been rendered unable, by the vertebral displacements, satisfactorily to execute their appointed offices.

It was stated in the history of the case, that the breath was at first disgustingly nauseous, tainting the surrounding atmosphere to a considerable distance. This offensiveness, as already observed, commenced soon after the accident, and disappeared with the cure of the spinal complaint. These circumstances constitute a curious and remarkable coincidence, which would appear to justify the conclusion, that the phenomenon was, in some way or other, produced by the mischief inflicted, however difficult may be the explanation.

Case XXII.

Case of Spinal affection, attended with affections of the pulmonary and digestive organs, *cured by Dr. Harrison.*

Miss Maria Drew, of Islington, when only three years old, was, to save her life, thrown, by the faithful nurse, out of the carriage

road, upon the foot pavement. Though much bruised and hurt by the accident, no bad consequences were apprehended. At the age of eleven she was forcibly pushed into a saw pit, was much bruised, especially on the whole of the left arm, which became black, and very painful upon motion. It is now believed, that she never wholly recovered from the first injury. After the second, she became gradually more delicate and ailing. She was soon fatigued, had a continual leaning towards the left side, and the digestive apparatus was generally out of order. At the age of 13, her deformity became clearly apparent, although it had probably commenced several years before. Notwithstanding the endeavours of different medical practitioners of high character, it visibly increased, and her bodily activity continually declined.

When I was consulted Miss D. was 15. The spinal column had sensibly given way from the top to the bottom; making, besides the double lateral curvature, other great contortions. Every vertebra was removed out of its proper place. The ribs, by their strong attachments to the vertebral pillar, following its irregularities, were also much displaced at the sternal ends. The breast-bone, clavicles, and scapulæ, were, in consequence, sensibly removed out of their primitive stations. From these various derangements, the trunk was greatly reduced in length, and equally augmented in circumference, as may be seen on viewing the cast taken immediately before the treatment commenced. The anatomist will readily understand, that whenever the spine and thoracic bones are much deranged, all the internal organs are necessarily misplaced, and that infirm health must of course ensue. In the present instance, every internal function had been impeded for years. Constant difficulty and shortness of breathing, increased by the slightest movement of the body or the least agitation: sneezing was often attempted, but could be seldom performed. There was a constant dry cough. The heart beat irregularly, and struck violently against its bony covering. Appetite was depraved, uncertain, and defective: pulse small and weak: bowels usually constipated: menses had never appeared. As the spinal column recovered its natural position,

the ribs, sternum, clavicles, and scapula, all recovered their proper positions. By this restoration, the trunk is much elongated and more shapely. Among the happy results of this important change in the bony structure, she is not only taller, and transformed into a beautiful figure, but the internal organs being replaced, their healthy functions again manifested themselves. By this simple proceeding, and without the aid of drugs, good health has been regained, thus terminating her otherwise interminable afflictions.

Case XXIII.

Case of Curvature of the Spine, attended with Palsy of the right Leg, *cured by Dr. Harrison.*

Master T. C., 9 years of age, of the sanguine temperament, and in possession of good general health, although he has a delicate constitution, with soft, fine skin. He is afflicted with a protuberant curvature, six inches long, in the lower part of his back, which comprises the three last dorsal, and two or three of the upper lumbar vertebræ. All these bones have suffered a partial turn upon their axes towards the right, by which the transverse processes on that side are considerably depressed, while the opposite ones are proportionately elevated. He experiences great difficulty in walking a few steps, and is obliged to use crutches when he goes further. The right leg is nearly useless, and is much shorter than its fellow. He cannot stand upright unless supported, nor stretch out the right foot, even in bed. The great weakness and want of sensibility in this limb are probably occasioned by the sinking and partial turn of the luxated vertebræ towards the same side; the nerves, in consequence of this displacement, issue from the vertebral holes at unfavourable angles; by this deviation, the nervous energy is impeded in its way through the openings of the vertebræ to the affected members.

The distortion first showed itself three years and a half ago; the bones destined to form the protuberance were then merely rotated and turned towards the right, but not at all arched; three months subsequently, a large issue was formed on each side of the last dorsal vertebra. After the issues had discharged a great deal of purulent matter, and *weakened him very considerably, a slight elevation was first discovered between them.* He persevered in the use of the recumbent position for nine months, and in the issues for the same period of time. Finding that the distortion continued to increase under this treatment, and that his strength rapidly declined, the issues were closed, and he went to Brighton for the benefit of sea air. No other means, except shampooing, and the repeated application of blisters to the back, have been subsequently adopted. As the disorder commenced before the sufferer could give any particular information to his parents, they are unable to account for its origin otherwise than by conjecturing that it might proceed from the boy falling among some loose wood a short time previous to the appearance of deformity. He complained a great deal at the time; but as the pain soon left him, the accident was forgotten until the idea was revived by the distortion showing itself. Besides the gentleman who made the drains, three eminent practitioners have been consulted at different times, who approved of the issues, and the copious discharge proceeding from them. They all, moreover, declared positively that the cause of the complaint was wholly subdued by the remedies employed. They also asserted, that although the protuberance could not be reduced, because the vertebræ were joined together by a bony connexion, it would never get worse. Notwithstanding these positive assurances, and the incessant anxiety and care of the boy's distracted parents, the swelling visibly enlarged. In the alarm and despondency consequent upon this state of things, Dr. Harrison was applied to. After a careful examination of the parts, his opinion was, that so far from osseous union having taken place, the vertebral structure had never been affected; that the complaint was entirely fixed in the articulating fibrous compages of the joints, and that it admitted of an easy and speedy cure. Encouraged by this explanation and assurance, the

boy was forthwith confided to his care, placed in the recumbent position and treated in the usual way.—July 1st, 1823.

The spinal swelling is greatly diminished, and includes only three vertebræ. He has nearly recovered the sensibility and the use of his right leg.—October 2nd.

The tumour is reduced so much, that only one vertebra protrudes; the transverse process may be easily felt on the left side.—November 17th.

The lumbar spine has recovered its natural figure, and the inferior extremities their lost sensibility and action: they are of the *same length*. The cure was, therefore, pronounced to be complete, and the strengthening plan was adopted.—April 20th, 1824.

March 15th, 1835.—He is become a tall, stout youth, with a rosy complexion, and is in the enjoyment of excellent health. As the vertebral pillar remains in good order, he continues erect in his carriage, and perfect in his gait.

These cases are only a few of many that could be presented, as exhibiting by *cure*, the beneficial effects of Dr. Harrison's mode of treatment. The cases that follow exhibit the same results, but they exhibit also a point of view, in connexion with spinal complaints, of the highest importance; namely, the connexion between the SHORTENING OF THE LIMBS AND SPINAL CURVATURE.

A few Remarks on Deformities of the lower Limbs as connected with Spinal Curvature, with Cases illustrative.

Dr. Harrison, in the course of his observations on spinal diseases, was led of necessity to observe the subluxations and the distortions of the *inferior extremities*, and, in introducing the accompaning plates to the reader, with Dr. Harrison's observations, the object in view is, if possible, to show the intimate connexion between, and the dependence of *deformities* of the *lower limbs* upon, the *spinal curvature.*

Plate IX.

In the first print, the right thigh is bent inwards at the knee, and is, moreover, slightly rotated. The head of the thigh bone is consequently twisted in the cotyloid socket. The internal condyle of the femur inclines upwards, and its fellow is equally depressed. By this deflection the knee-pan rests on the external condyle. The hollow in the outside of the knee arises partly from the intrusion of the femoral condyle and knee-pan, but much more from the heads of the tibia and the fibula, (the two bones of the leg,) being driven inwards. The enlargement of the joint on the inside is occasioned by the thigh bone and tibia pressing unduly in that direction.

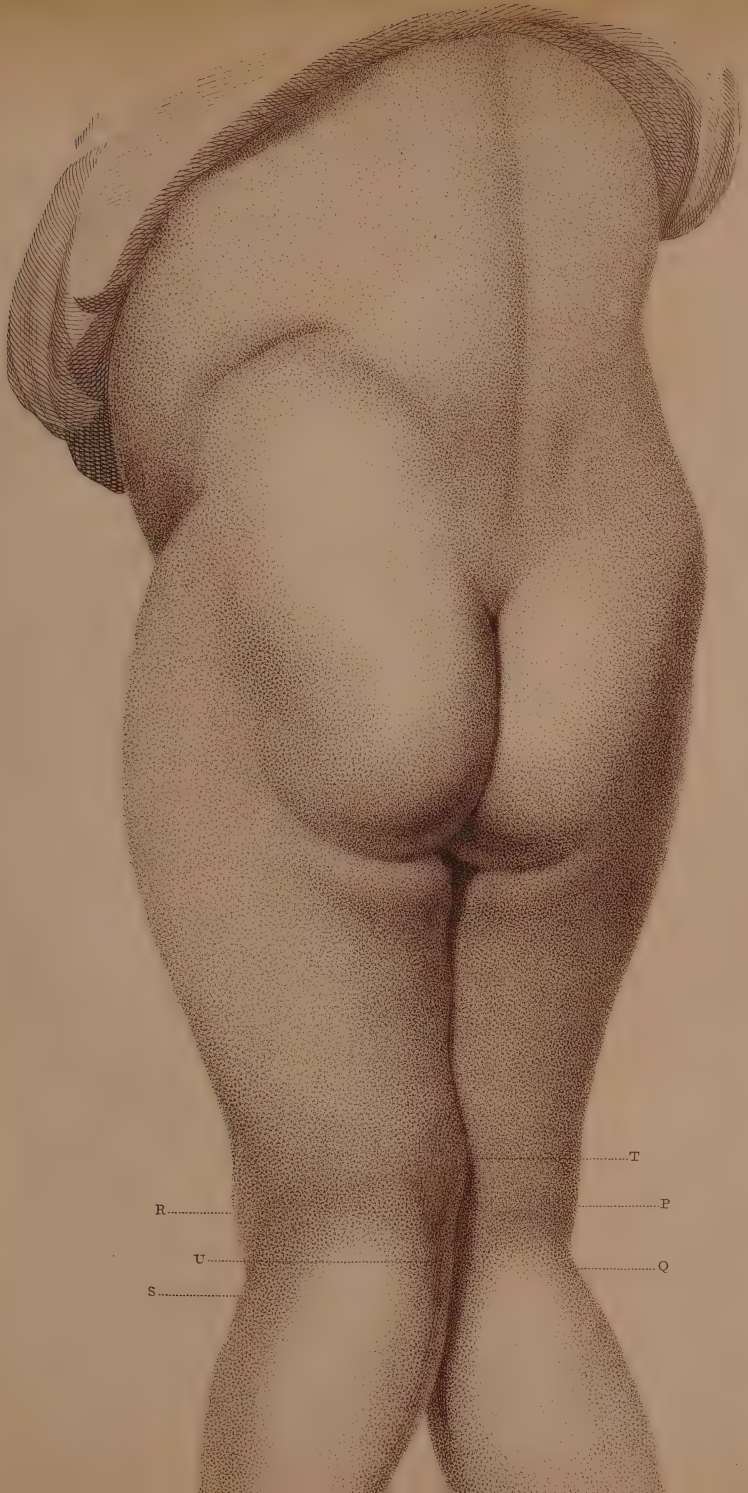
As the superior end of the fibula sinks into the hollow, the lower discovers an unusual prominence. The internal ankle also is forced outwards, by the displacement of the tibia at its upper extremity.

In the left thigh and leg the deviations are less striking; but the knee presses inwards, and the internal ankle is unusually protuberant. It is also evident, from the turn of the foot, that this ankle is partially dislocated.

Plate X.

Though the distortions are more indistinct behind, the defective arrangement is visible in both knees.


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Description of PLATE IX.—*Front View, Right Side.*

A. Hip joint concealed.
B. External condyle of the thigh bone.
C. Internal condyle of ditto.
D. A hollow, occasioned chiefly by the tibia sinking inwards.
E. Inner head of the tibia prominent.
F. The knee-pan.
G. Head of fibula pushing inwards.
H. Outer ankle.
I. Inner ankle.

Front View, Left Side.

K. Outer condyle of the thigh bone.
L. Outer head of tibia.
M. Knee-pan.
N. Inner ankle.
O. Foot inclined inwards.

Description of PLATE X.—*Back View, Right Side.*

P. Outer condyle of thigh bone tending inwards.
Q. Outer head of tibia pushing inwards.

Back View, Left Side.

R. Outer condyle of thigh bone.
S. Upper head of tibia.
T. Inner femoral condyle.
U. Inner head of tibia.

The irregularities discoverable in these two prints were copied from a girl of six years old. She was well shaped at birth, and continued a good figure, till she fell into weakly health about four years ago. From that time she began to falter in her gait, and to be soon tired. Her knees gradually lost their proper direction, and inclined inwards. Shortly after, her ankles became affected, and jutted out more than they had previously done. Inability to

move her limbs, and deformity, have been constantly increasing since her first seizure. She walks with an infirm step, and has great difficulty in elevating her feet from the ground.

It is clear, from the appearance of both limbs, that the malady is confined to the hip joints, the knees and the ankles. These, having lost their natural disposition, are true subluxations, or imperfect dislocations.

A steel machine, constructed according to the above-described principle, and possessing joints to correspond with the several articulations, was fixed to the lower limbs. The little girl wore it for some time, and conformed strictly to the prescribed rules. During this period, the hip and the ankle joints were entirely replaced. The knees also acquired a better disposition; but less attention having been subsequently bestowed upon the case, the patient's recovery has been proportionably retarded.

The three next engravings are intended to distinguish and explain the common variety of *club feet*, the *varus* of authors. In the first, the neck of the astragalus is considerably elongated. It is, moreover, bent inwards; whereas the perfect bone is in this part nearly straight. By its deviation, the position of the foot is so much changed, that on attempting to put it down, the sole is rendered incapable of expansion, or of being spread flat upon the ground. In walking, the weight falls upon the outer edge; though for convenience and use it should rest upon the entire sole of the foot.

Plate XI.

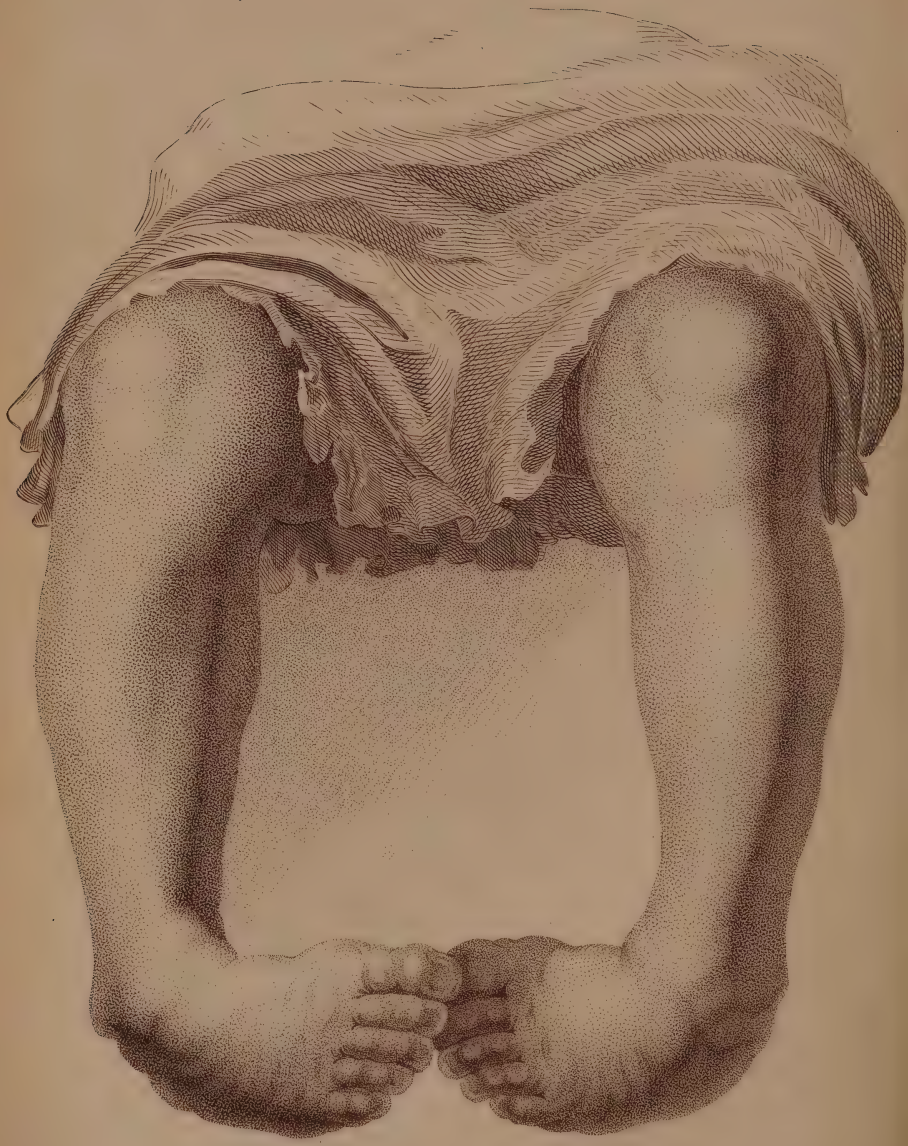
*Explains the Skeleton of a Child's Club Foot.**

1. Inner ankle.
2. Outer ankle.
3. Inner edge of astragalus. } Shewing the curved direction
4. Outer edge of astragalus. } of this bone.
5. Marks the attachment of the capsular ligament, beyond

* Dublin Hospital Reports, vol. i.



S. Bellin sculp.t



B. R. Green del.

S. Bellin sculp.

which the bone is drawn out into an oblong head. N. B. Os naviculare had never moved on the articular surface here seen.

6. Os naviculare very much hollowed, to adapt itself to the sharp form of the anterior head of the astragalus.

7. Body of cuboid bone, very convex.

8, 9. Show the places where the articular capsules had been attached, and the great length of bone included within each of these sacs, all of which was covered with cartilage.

10. Outer edge of the os calcis.

11, 12, 13. The three cuneiform bones.

Plate XII.

Was taken from a Child of Three Weeks old.

1. Inner ankle.
2. Outer ankle.
3. Internal edge of the foot turned upwards and inwards.
4. External edge of the foot turned downwards and outwards.

Plate XIII.

Was taken from the Left Foot of an Adult Male.

Most of the tarsal bones are sensibly mis-shapen. The striking irregularity of this club foot shows itself in the almost total inversion of the outer or plantal arch. The plantal, or, as it is often called, the solar arch, consists of the os calcis[1] or calceum, the cuboides,[2] and metacarpal[3] bones of the little toe. In a well-made foot, the os calcis rises to complete one side of the arch, the cuboides and metacarpal bones forming the other.

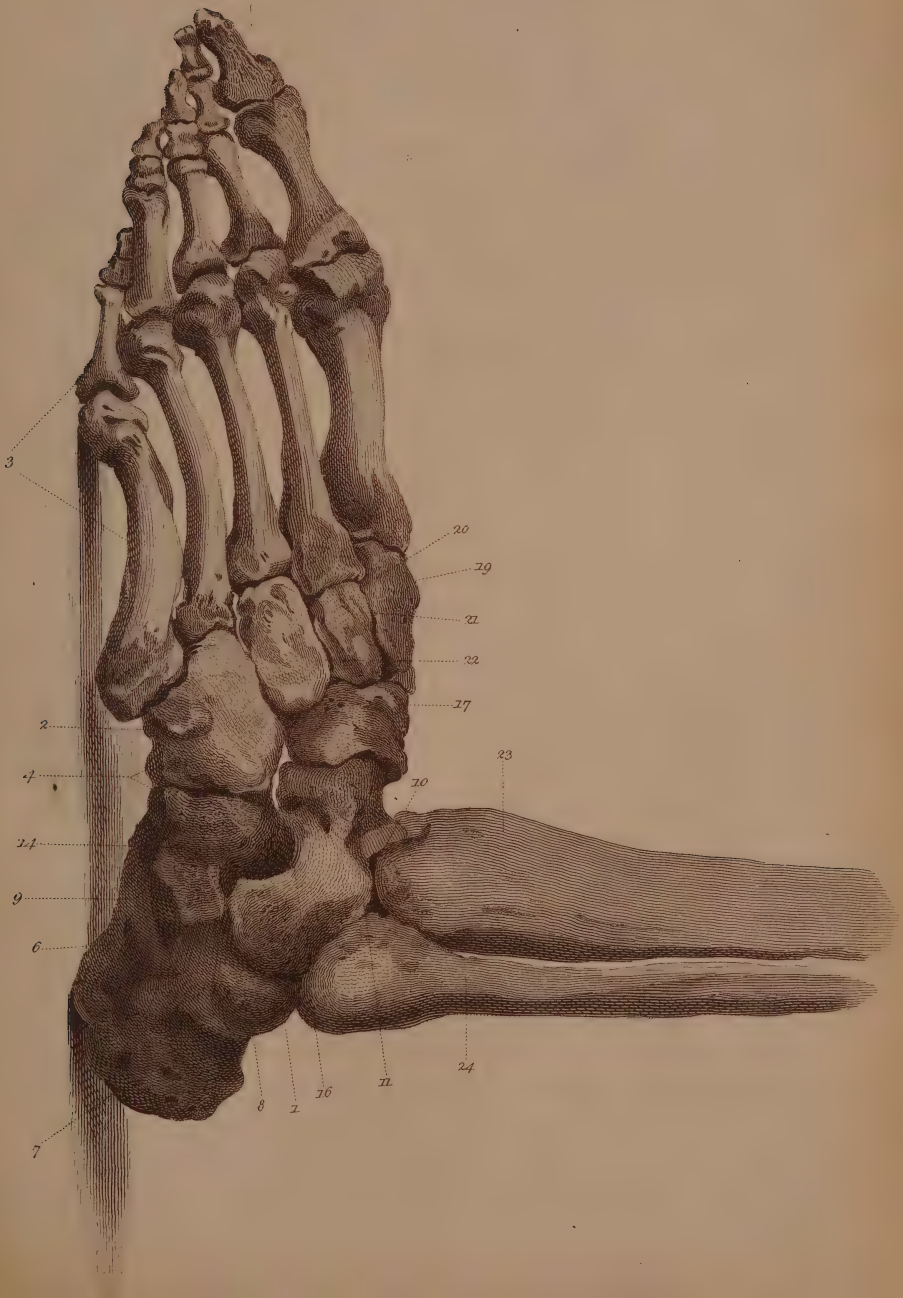
In the deformed foot, the calceum, instead of ascending towards the astragalus, as in the other limb, follows a more level[4] course. The arch of the sound foot measures in height one inch and seven eighths: that of the other[5] is rather less than an inch. The os calcis is of nearly the same length in both limbs; but the left is much thicker and rougher.[6] Its lower part, particularly the projection of the heel,[7] turns considerably inwards, giving occasion to

a large portion of the deformity. The outside is more convex[8] below the fibula than in the sound calceum. By this disposition, the upper part where it joins the astragalus,[9] presses outwards. The face[10] of the astragalus, at its articulation with the leg[11] bones is therefore not quite horizontal. The internal edge is a little raised,[12] and the external somewhat depressed.[13] That portion of the os calcis which advances towards the cuboides, is also lower. The fossa,[14] situated between it and the astragalus, is consequently larger than natural. The increase is owing both to the calceum[15] sinking at its fore part, and to an enlargement in the groove[16] of the astragalus. The os naviculare[17] is elongated, and rather broader. It has never moved. The os cuboides[18] is expanded every way. The internal cuneiform[19] bone is likewise particularly large. Its upper portion, instead of rising to a ridge, is flattened.[20] The other two[21 22] preserve nearly their ordinary shape. The tibia[23] and fibula[24] are rather longer than those of the right side, and formed an obtuse angle at their junction with the astragalus. Little is known of the history of this case. The man was a malefactor, who expiated his crimes on the gallows. His skeleton became the property of Mr. Samuel Bucknill, a respectable medical practitioner at Rugby, in Warwickshire. This gentleman obligingly favoured me with the loan of both legs and feet, that I might have the engraving executed under my own eye.

In the first print, the club foot was occasioned principally by the bent figure of the astragalus. In this the contortion involves nearly all the tarsal bones. They have together produced a twist in the several parts of the foot, which, by elevating one of its sides, and depressing the other, gave permanency to the deformity.

Though I have given an account of the club foot in this place, it is more in deference to the authority of Hippocrates, than from a full conviction in my own mind, that this disease is really a dislocation. The reader will perceive, on referring to the engravings, that the deformity proceeds more from a faulty condition of the astragalus and other tarsal bones, than from their articulating compages.

In infants, the bony fabric is imperfectly ossified, is soft, and


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admits of being moulded into almost any shape and form, by the constant and regular operation of the means recommended. At this early age the bones are so plastic and yielding, that with time and judicious management, a great number of mis-shapen limbs may be cured. As the child advances in years, the bones grow firmer, more rigid, and brittle. These changes take place progressively, and increase the difficulties till they are at last insurmountable.

Having introduced these observations and illustrations, some additional cases will now be recorded, which will show the effect of spinal curvature upon the limbs, in producing deformities.

Case XXIV.

Case of lateral outward Curvature, *by Drs. Harrison and Serny.*

Miss W. aged 14, of Belgrave Square, has been under the care of the most eminent practitioners in the kingdom, for a lateral and an outward curvature of the spine. The effects of this curvature were, that the *right shoulder* was the *higher*, and the *right foot* the *shorter*. Having received no relief from the diligent, and, according to *their* views, skilfully directed means, she was placed under Drs. Harrison and Serny; and, after six months treatment, the several symptoms of the lateral and outward curvature, viz. impaired digestion, affection of the liver, constipation, and other morbid phenomena, were entirely removed, and her health perfectly recovered. She was then placed under the strengthening plan, and, in March 1837, walked, and appeared a very good figure, to the surprise and the gratification of her friends. She has, since that period, entered into life, and is perfect in her form, and enjoys the delights of exercise of every kind, except riding on horse-back.

Case XXV.

Case of double Curvature, *cured by Drs. Harrison and Serny.*

Miss E. S. aged 24, of Thayer Street, Manchester Square, now resident at York, came to be under the care of Drs. Harrison and Serny, about the month of July 1835. She was affected with a double lateral curvature of the spine, the *right shoulder* being much raised, the *right leg the shorter*, and the whole of the vertebræ alternately raised and depressed, thereby constituting a very complicated case. The alternate compressions and depressions being as high as the first cervical vertebra, all the internal organs below the same are much deranged; the breathing, the speaking, the digestion, the circulation, and all the secretions and excretions, are highly impaired, so as to make life very painful; the vitality of the whole frame being in a highly depressed condition.

The treatment commenced July 1835, and Miss E. S. was pronounced cured, November 1837.

This young lady (July 1840,) is in the most perfect health, with a fine figure, and enjoys the pleasures of life; whereas, previous to this period, life was a mere accumulation of pain and miseries, both to herself and to all her friends.

Case XXVI.

Case of double and outward Curvature, *cured by Dr. Harrison and Dr. Serny.*

Miss L. S. (sister to Miss E. S.) aged 25, of Thayer Street, London, now resident at York, came under the treatment of Dr. Harrison and Dr. Serny, in the month of August 1835, for a *double curvature* of the spine, the *right shoulder* being much higher than the *left*, and the *right leg* shorter than the *left*.

Besides the double lateral curvature, there is also an *outward* curvature in the lower part of the spine, which obliges Miss L. S. to bend very forward, when in the act of walking, so that she appears as if in danger of falling.

Previous to, and during the time of treatment, she was, as well as her sister, subject to many internal complaints of the digestive organs; and it was necessary to administer anthelmintics frequently, to overcome the extraordinary symptoms, with which she had been affected for many previous years.

Miss L. S. was pronounced cured, May 1837, and is now graceful in her deportment.

Case XXVII.

Case of double and outward Curvature, attended with general and permanent Spasms of the whole Body, *cured by Dr. Harrison and Dr. Serny.*

Miss W. aged about 18 years, November 1836, of Howland Street, and from the neighbourhood of Gosport, Hants.

This case may be regarded as of a very complicated character, having resisted, from the beginning, the most approved means of relief. This young lady has been obliged to be fed with a spoon for some years, *having lost the use of her hands.*

The family cannot give any originating cause of the complaint.

Miss W. was six months under Drs. Harrison and Serny, before the least improvement took place; the first indication was a *nod of the head,* from which good symptom, Dr. S. thought Miss W. might recover. Her case was really desperate, for, from the first cervical to the last lumbar vertebra, no human power could produce the least flexion, and the four limbs were not much better: she being in a state of constant muscular contraction, in technical language, in a *tetanic* state, in which state she had been several years.

The spinal deformity consisted of the double lateral and outward curvatures, the *right* shoulder was much *elevated* and the *right* leg the *shorter*. Miss W. was obliged to take more medicine than any other of our patients; the digestive organs were much deranged, and, from the time she first moved her head, I was glad to find that every day there was a gradual improvement in all the symptoms; and, in the month of August 1838, Miss W., supported between two persons, walked for a few minutes. She is now in perfect health and figure, and, as a proof of the perfectness and of the cure, can remain at church during the whole of the service, attending to the various duties, attached to her creed.

Miss W., previous to her becoming completely and permanently spasmodic, had a large blister applied from the last cervical to the os sacrum, and this is the third case of this practice that has come under my notice, (Miss V. of Tooley Street, Borough, and Mrs. S. of Hampstead). I am obliged to conclude that the blisters produced internally upon the spinal cord an effusion, which compressed the spinal cord, and was the cause of the said permanent spasmodic or tetanic affection; which was cured without the use of mercury, by our general mode of treatment.

Case XXVIII.

Case of double lateral and outward Curvature, *cured by Dr. Harrison and Dr. Serny.*

Miss W. had a sister, Miss M. W., who came under the treatment August 1837, aged about 14 years, with an outward and a double lateral curvature, and with *one* of her limbs *several inches shorter* than the other, being obliged to walk upon crutches.

The usual treatment, modified by circumstances, was adopted. The result was as usual.

Miss M. W. walked in September 1838, (supported between two persons) for a few minutes only, and once a-week afterwards; and

before the three months of her walking, under my inspection, had expired, her figure and deportment were acknowledged most perfect. Is not this a proof that the treatment, in the young, can always command the shape? and, therefore, what a blessing has the existence of Dr. Harrison been, in developing the means by which so much anxious thought, and bodily misery can be removed from the sufferers and their friends.

Case XXIX.

Case of lateral and outward Curvature, *cured by Dr. Harrison.*

Miss H. This case of deformity, was one in which the letter S represented the form of the spine, the spine being completely lost under the right shoulder blade, which shoulder was so much raised, as to cause her *ear-ring to touch it.* The ribs of the right side were elevated, at least four inches, and the hips were equally displaced, so as to form the greatest deformity of the spine.

Six of the most eminent practitioners in London had, in the presence of each other, pronounced that she must die in less than three months, and they did all they could to prevent her from being placed under Dr. Harrison's mode of treatment, but it was ordained by providence to the contrary.

To show the violence of the opposition which Dr. Harrison had to encounter, it is proper to state, that the father of this lady was a medical practitioner, in general practice, in London. The medical men, some of whom now hold the highest positions in the chartered corporations of surgeons and physicians, were so offended when the anxious and affectionate parent, having determined not to lose (when no prospect of recovery under their skill was present,) an opportunity which was afforded by Dr. Harrison's mode of treatment, that they at once gave up his acquaintance, refused to send him any prescriptions, and the practitioner was reduced to comparative want, and on his death-bed, declared to an old servant of

the family, "*My daughter's cure has been my death.*" He died of broken heart.

She commenced the treatment at the age of 17, in the year 1820. This young lady was, as Dr. Harrison predicted, restored to good health, and is now the mother of eight children, (July 1840,) the cure remaining perfect after twenty years.

This case is a proof that the patient, affected by deformity, can not only be cured, but the cure rendered permanent, and thus realize happiness to the patients, their families, and friends.

Case XXX.

Case of Curvature of the Spine, with one limb shorter than the other, and attended with the loss of the power of using the lower limbs, *cured by Dr. Harrison.*

Miss Maria Howard, aged 13, of the sanguine temperament, lax fibre, and with her left leg an inch longer than the right, began the usual treatment the 4th of June, 1834. She had lost the entire feeling and use of the lower extremities; strong frictions to the limbs, or a smart stroke upon the soles of her feet, excited no sensation. They were always cold, the skin was mottled and of a dull hue; she had been some months under the treatment of a talented and experienced surgeon, who declared, when the *toes* were *insensible and without motion*, he had never witnessed a cure. On examining the naked back, which he had neglected to do, most of the dorsal vertebræ were found twisted towards the right, and the ribs forming an elevated wreath in the same direction; the lumbar hollow was more than obliterated, the spine actually projected. From the displacement, or subluxation of so many vertebræ, the spinal cord was compressed, so as to prevent the usual communication between the brain and paralyzed members; hence the will had lost its power over the parts, and impressions

made upon them could not be carried to the sensorium. By correcting the deformed spine, she soon *gained her feeling*: it afterwards became so *morbidly acute*, that she shrunk from the touch. In a few weeks, the sensibility was rendered natural, and remains so. In less than a month, a very slight action was perceptible, first in one foot, and then in the other. The motion of the limbs has kept pace with the improvement in her back.

February 28th, 1835.—The action of the limbs, and natural figure of the spine, being completely recovered, the primary treatment is to be discontinued, and tonic remedies substituted.

April 2nd.—The patient was, this day, suffered to rise from her couch, and indulge in a short walk, which she performed with ease, and without feeling inconvenience from the exertion. Although she had remained constantly on her crib, since last June, she experienced no difficulty in leaving it, nor uneasiness from being erect.

On reading this case, how correct appears the conclusion of Dr. Harrison. Here it is clearly established that the cause of paraplegia was in the back; that, wherever disproportion of the inferior extremities *occurs, the medical practitioner will, in future, neglect his duty, unless he examine into the condition of the back-bone.*

Case XXXI.

Case of outward Curvature, *cured by Dr. Harrison.*

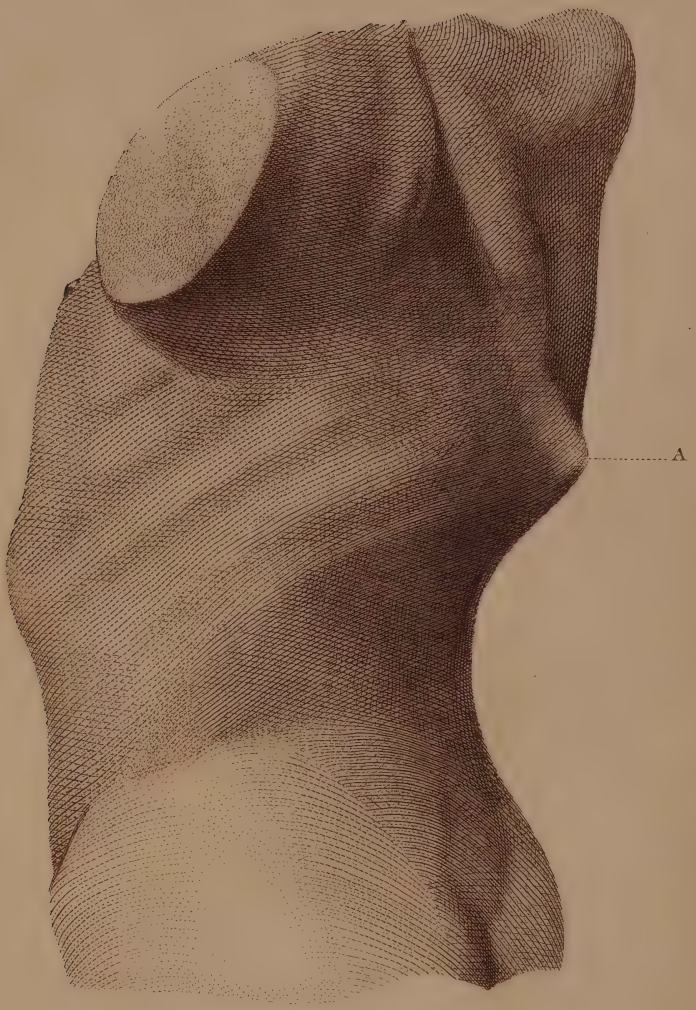
Miss Sarah Sophia Tarrant, of Newington Green, aged 9 years, has always been very delicate. It is believed she was born under the seventh month, but was remarkable for the symmetry of her person and the beauty of her features. Her countenance is dull, sallow, and contracted; the eye is languid, and she has an antiquated look. She has a deep and most distressing cough, which returns in fits, and at short intervals. Such is its violence, that at every attack the attendants are alarmed with the apprehension

of its proving fatal. The dorsal vertebræ rise gradually from the neck to the ninth inclusive. All the ribs are more or less displaced; the three inferior ones are elevated, with two of the superior lumbar vertebræ, into a large projection. Six ribs on the right, and five on the left, swell out with them to assist in making the protuberance. The chest is much contracted in front and behind.

The complaint was occasioned by falling upon the ice in January 1820. It was first discovered on the 25th of the following month, and had only just commenced: it has been gradually increasing ever since. In the previous Autumn, she often felt pain in her back after stooping, but no distortion was perceptible till the time mentioned. She measures only three feet six inches. Her parents are of opinion that she has not grown for the last year and a half. Appetite is remarkable, being equal to that of two healthy adults; but her food never seems to impart any nutriment. Bowels are obstinately constipated: the motions have a strong and peculiar odour, something like the washings of a foul gun; they are generally hard, in some parts clay-coloured, and in others having the appearance of pickled walnuts. She is subject to very severe and most distressing pains in her legs and thighs, which are often cold and numb.—April 3rd, 1821.

Her spirits are much more lively; she is no longer fretful, and the appearance of the countenance is greatly improved. She has gained flesh and weight since she began the treatment. Appetite is natural; her motions are good; she is no longer subject to hasty and irresistible calls to make water. The heart, which beat forcibly, and much below the natural situation, beats at its proper place; its strokes are no longer violent or particularly strong. The cough is much relieved, both in severity and force. The protuberance is greatly reduced; nine of the eleven ribs have been nearly restored to their proper situations; two on the right side remain something displaced. She is increased in height two inches.—May 10th, 1822.

She is always cheerful, is much improved in her general appearance, and has an open countenance. The cough has entirely left her. Her chest and loins are much broader, and finely turned.



Sarah Sophia Tarrant.

B.R. Green del.t

S. Rollin sculpt.



Sarah Sophia Tarrant.

P. R. Green del.t

S. Bellin sculp.t

Appetite is regular and good, but not extraordinary: she lives upon fresh animal food for dinner, with a suitable proportion of vegetable matter, and this diet agrees with her. The ribs on the left side have been some time replaced; the eighth and ninth on the right side are still slightly elevated. All the vertebræ, except the eleventh and twelfth dorsal and first lumbar, have been entirely replaced, and these are not more than a quarter of an inch too high.—June 25th, 1822.

The recumbent posture has been strictly observed, and her health has been uniformly good, ever since the last report. The swelling is wholly removed, except in the three vertebræ formerly mentioned, which are still slightly protuberant, but the ribs have been some time reinstated. She now measures in length four feet four inches.—October 10th, 1823.

Miss S. S. Tarrant gets up every day and walks about for some time with great ease to herself. The health, complexion, and general appearance, continue unimpaired.

She has through the whole confinement been cheerful and happy, from a strong prepossession, that the plan she was pursuing would ultimately restore her to the full possession and enjoyment of all her faculties. I have the gratification to add, that her patience and most sanguine anticipations have been amply rewarded.—Dec. 5th, 1823.

Plate XIV. taken before and Plate XV. after the treatment concluded.—A. the most prominent vertebræ.

Case XXXII.

A Case of double lateral Curvature of the Spine, attended with various distressing symptoms, *cured by Dr. Harrison and Dr. Serny.*

The daughter of Lady B., about 17 years of age, has suffered for several years from a *double lateral* curvature of the spine, the *right* shoulder being very considerably higher than the *left.*

Miss B. is about five feet ten inches high, of a fair complexion, and is, in every respect, except the spinal condition, well proportioned in her whole frame; but, in consequence of her being so young, so tall, and, at the same time, embonpoint, the weight of the upper part of her body and of her head, are too heavy to be supported in a proper position; for which reason, the curvature daily increases, and, by the consequent compression on the spinal cord, the badness of general health augmented also.

She suffered much from occasional severe head-ache; great difficulty of breathing; bad digestion; bowels confined; heat of the lower extremities much diminished; great difficulty in walking, from general weakness; dry skin; and the whole of the secretions were impaired.

For these symptoms and many others, from which she had for a long time suffered, she had been under the care of all the most eminent physicians and surgeons in London, but *without any benefit.*

At last, finding no benefit gained, Mr. D., of George Street, Hanover Square, having been the medical attendant for many years of the family, gave his opinion, *that no one but Dr. Harrison could be of service to Miss B.*, and, on 9th of November, 1836, we commenced the treatment. A cast was previously taken to certify the existing state of the deformity; which was so very severe, that the late Mr. Earle assured the family that it was *impossible any thing could be done for Miss B.*

The usual treatment was continued till November 1838, when it was left off from family circumstances. Miss B. was then placed upon the strengthening plan, and, six months after, was able to walk for five minutes, supported between two persons.

Her first appearance on her feet was peculiarly striking, being six feet and one inch high, with no apparent deformity; and, though weak in the limbs, yet, being well proportioned in her whole frame, her deportment was truly gratifying and elegant. Miss B. continued to walk once a-week only, for three months, increasing one minute each time; and, at the end of the said three months, this young lady had lost one inch and a half in her height, being

reduced to five feet eleven inches and a half. Her strength also became considerably increased, *her health perfect,* and her present state spread general happiness through her family and friends.

In conclusion, the medical attendant of the family must feel much pleased at the result; for, had it not been for the openness of his mind to conviction, a quality unfortunately rarely exhibited by medical men in reference to Dr. Harrison, this young lady must have been lost for ever.

Case XXXIII.

Case of double lateral and outward Curvature, attended with Paraplegia, or the loss of the power of using the limbs, *cured by Dr. Serny.*

Ann Roberts, aged 13, in the month of August 1837, received an injury in her spinal column, by being dragged upon her back by the shoulders, the head foremost, down a flight of stairs, by a school-fellow. Immediately after she experienced great debility in all her limbs, which gradually increased for eighteen months, when she was obliged to leave school and go home.

In April 1839, I undertook the cure, the patient labouring under a double lateral and outward curvature. All the lumbar vertebræ, and about four of the lower dorsal vertebræ, were very much raised. A depression of considerable extent, (embracing several of the dorsal vertebræ), had taken place between the shoulder blades.

The action of the bowels was not regular; the urine was ammoniacal, as well as the breath; the appetite was good.

On examination of the lower limbs, I found she was disposed to walk upon both outward ankles, and the toes were turned towards the inside of the soles of the feet. She did not complain of any pain, but of general weakness, not having the power even to *lift up her feet* in the act of walking.

Her *right* leg was the *shorter*, and the *right* shoulder the *higher*. Both arms and hands felt benumbed, and exceedingly weak, having very little power in them.

The treatment of Miss Roberts continued four months; and, six months after the cure, she was completely restored in her figure and health, and walked very well.

This case shows, like Master Chilcott's, what a strong disposition there exists in the lower limbs to partake of the disease of the spine, and must convince the medical practitioner how important it is to bear this in mind.

To conclude the consideration of these important matters: all the cases, which have been detailed, will tend to prove the truth of the late Dr. Harrison's opinion, that the *ligaments* will, in time, bend, extend, and give way, so as to produce the greatest deformity, and ultimately become permanently thus affected; and that such modification of the ligaments can be produced by a malposition, or forced position of the body, for some time continued. Of the ligaments being liable to such modifications, many proofs have been afforded by foreign orthopodists, who have written upon this subject; and in this country also by Mr. Charles Wing, who, in his valuable work on Factories, has fully confirmed the above statements, of the injuries produced on the constitution, by a long continued forced position of any part of the body. Many of the votaries of the devotional system prevalent in Hindostan, certify the above most completely. But to enter into this matter a future opportunity must be sought after.

Directions for Patients.

As many patients wish directions as to the plans to be adopted, after the spinal curvature is removed, the following copy of a letter to Mrs Wells, from Dr. Harrison, (which letter he wished to be

considered as a *circular* for the direction of patients after they have been cured,) forms the conclusion of this work.

"*Holles Street, Jan.* 30, 1824.

"As you are shortly to leave London, I am desirous, before your departure, to trouble you with some advice respecting the future management of your health. I do it with the greater pleasure, because you will, I think, second my endeavours with the best intentions to fulfil them.

"I wish to caution you, not to place in danger the permanency of your recovery by hasty and rash exertions. With proper attention and unwearied vigilance you cannot miscarry; but unless you submit to the enclosed directions, you will assuredly fail. The ligaments will slowly elongate, and you will gradually lose all the advantages of my successful exertions for your benefit.

"I am sorry to feel it my duty to state facts, and recommend measures which will, I am afraid, be unpleasant to you. But, in as much as there is no royal way to health, God having made us all equal in this respect, you only stand upon the same footing with the rest of your sex.

"I am anxious to impress upon your mind the great necessity of continuing to maintain undeviating recumbency, till the predisposition is entirely subdued. It is impossible to determine with certainty in any person, how soon the spinal column shall have acquired strength enough, after the treatment is finished, to maintain an erect deportment, and perform the usual offices of life without danger. I am inclined, all circumstances considered, to recommend to you constant lying for the next six months; afterwards the effects must be carefully watched, and the periods of sitting up gradually extended, as they can be safely indulged. In relaxed habits, and in all cases for a long time, after the spine has been restored, the erect must be frequently exchanged for the reclining posture, in order to relieve the back from injurious pressure, and enable the vertebral joints to freely exert their inherent elasticity. The spinal column must be frequently surveyed by some careful person, and the slightest deviation

immediately corrected, otherwise it will acquire confirmation, and increase by delay. It is of importance to remark, that, along with distortion, the health always declines, and the countenance becomes aged and contracted. These and various other distressing consequences may be prevented, by submitting to some temporary sacrifices; so trifling indeed, when compared with the magnitude of the danger, that I am sure you will not hesitate to comply with whatever is required to prevent a relapse. When you are doubtful as to the effect of any act, refrain from the performance of it. You cannot suffer by over care, though you may easily err by gratifying your inclinations. The frictions and liniment cannot be too long continued.

"So many considerations of health and of usefulness are connected with a proper disposition of the vertebral pillar, that I need not, I hope, employ more words to impress upon your mind the great necessity of uninterrupted vigilance for the next few years."

FINIS.

J. Trapp, Printer, 31, Budge Row, London.